CONSTRUCTION NEWS

Supplement to ENGINEERING NEWS. New York, January 12, 1905.

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PLANS AND SPECIFICATIONS ON FILE.

The following Plans (P.), Specifications (S.), and Bidding Sheets (B. S.), may be seen at the office of The Engineering News Publishing Co., 220 Broadway, New York:

Bids close	Work.	Place.	On file.	See issue.
Dec.				
Jan.				
*17	Boiler, etc.	Spring Lake, N. J.	S.	1-12
*23	Water-wks, etc.	Louisburg, N.C.	S.	1-12
*25	Water-works, etc.	Oxford, N. C.	P. & S.	1-12
*28	Electric fixtures.	Cheyenne, Wyo.	S.	12-29
4	Latrine	Charleston, S. C.	S.	1-12
28	Latrines	Washington, D. C.	S.	1- 5
29	Switchboard	Washington, D. C.	S.	1- 5
Feb.				
4	Shears	Washington, D. C.	S.	1- 5

*Work advertised in Engineering News.

NOTE.—We are desirous of securing specifications and bidding sheets (and plans when not too bulky) of pending work for file in our New York office for the benefit of contractors or others who may be interested in the work. If more sets than one are sent us we shall be pleased to distribute these to contractors who ask for them. When the work is advertised in Engineering News a note that the plans are filed with us will be added to the advertisement without cost.

LIST OF CONTRACTS PENDING.

Bids close. Work. Place. See issue.

LIGHT, HEAT AND POWER PLANTS.

Jan. 15. Electric plant, Humble, Tex. ..... Jan. 5
Jan. 16. Gas franchise, Fullerton, Cal. ..... Dec. 22
Jan. 17. Boilers, etc., Spring Lake, N. J. ..... Jan. 12
Advertised, Eng. News, Dec. 30 to Jan. 19.
Jan. 21. Electric system, St. Paul, Minn. ..... Jan. 12
Jan. 23. Electric station, Denmark ..... Jan. 12
Jan. 24. Gas franchise, Oceanside, Cal. ..... Dec. 22
Jan. 21. Electric system, Ft. Snelling, Minn. ..... Jan. 5
Jan. 24. Electric system, Newport, R. I. ..... Jan. 5
Feb. 2. Power boilers, Columbus, Ind. ..... Jan. 12
Feb. 15. Generators, Chicago, Ill. ..... Dec. 22

BRIDGES.

Jan. 12. Bridge, Hoopeston, Ill. ..... Jan. 5
Jan. 13. Bridge, Lewiston, Idaho ..... Dec. 8
Jan. 14. Bridge, superstructure, Oshkosh, Wis. ..... Dec. 29
Jan. 14. Bridges, Plattsmouth, Neb. ..... Jan. 12
Jan. 15. Bridge, Minneapolis, Minn. ..... Jan. 12
Jan. 16. Bridge, Waba, Ont. ..... Jan. 5
Jan. 19. Bridge, Toledo, O. ..... Jan. 5
Jan. 19. Bridge, repair, New York, N. Y. ..... Jan. 12
Jan. 19. Bridge, Toledo, O. ..... Jan. 12
Feb. 6. Bridge, Santa Barbara, Cal. ..... Jan. 5
Feb. 6. Bridge, Santa Barbara, Cal. ..... Jan. 12
Feb. 6. Bridges, Topeka, Kan. ..... Jan. 12
Feb. 7. Bridges, steel, Muscatine, Ia. ..... Jan. 12
Feb. 14. Bridges, stone, Napa, Cal. ..... Dec. 29

BUILDINGS.

Jan. 12. Stable, Brooklyn, N. Y. ..... Jan. 5
Jan. 14. School, Rockland, Mich. ..... Dec. 29
Jan. 16. Hospital, Savannah, Ga. ..... Dec. 29
Jan. 16. Armory, Louisville, Ky. ..... Jan. 5
Jan. 18. Heating apparatus, Yankton, S. Dak. ..... Dec. 22
Advertised, Eng. News, Dec. 22 and 29.
Jan. 19. Post buildings, Ft. Meade, S. Dak. ..... Jan. 5
Advertised, Eng. News, Jan. 5 and 12.
Jan. 19. Post office, Fresno, Cal. ..... Dec. 8
Jan. 19. Fifteen buildings, Ft. Des Moines, Ia. ..... Dec. 29
Jan. 20. Officers' quarters, New York, N. Y. ..... Dec. 29
Jan. 23. School, Cincinnati, O. ..... Jan. 12
Jan. 23. Electric fixtures, Indianapolis, Ind. ..... Jan. 12
Jan. 25. Post office, Washington, Pa. ..... Dec. 8
Jan. 26. Brick hospital, Mohave City, Ariz. ..... Jan. 12
Jan. 20. Building, Ft. Logan Roots, Ark. ..... Dec. 29
Jan. 28. Light fixtures, Cheyenne, Wyo. ..... Dec. 29
Advertised, Eng. News, Dec. 29 to Jan. 19.
Jan. 30. Post office, DeKalb, Ill. ..... Jan. 5
Advertised, Eng. News, Jan. 5.
Jan. 30. School, Webster, N. Dak. ..... Jan. 5
Jan. 31. Wiring, Walla Walla, Wash. ..... Jan. 5
Jan. 31. Post office, Albert Lea, Minn. ..... Dec. 8
Advertised, Eng. News, Dec. 8 and 15.
Feb. 1. Court house additions, Goshen, Ind. ..... Dec. 29
Feb. 1. Court house, Ogden, Utah ..... Jan. 12
Feb. 1. Church, Zanesville, O. ..... Jan. 12
Feb. 2. Hot water heating, Atlantic City, N. J. ..... Jan. 12
Feb. 4. Academy, Canadaigua, N. Y. ..... Jan. 12
Feb. 6. Heating plant, Fort Mott, N. J. ..... Jan. 12
Advertised, Eng. News, Jan. 12 to Jan. 26.
Feb. 7. Post office, Nevada, Mo. ..... Dec. 29
Advertised, Eng. News, Dec. 29 and Jan. 5.
Feb. 9. Post office, Natchez, Miss. ..... Jan. 5
Feb. 9. Coal shed, Tompkinsville, N. Y. ..... Jan. 12
Advertised, Eng. News, Jan. 12 and 19.
Feb. 9. Post office, Natchez, Miss. ..... Jan. 12
Feb. 14. Steam heating, Batesville, Ark. ..... Jan. 12
Feb. 15. Steam heating, Chillicothe, O. ..... Jan. 12
Advertised, Eng. News, Jan. 12 to 19.
Feb. 21. Post office, Westchester, Pa. ..... Jan. 5
Feb. 23. Post office, Decatur, Ill. ..... Jan. 12

WATER SUPPLY AND IRRIGATION.

Jan. 12. Water-works, Newcastle, Neb. ..... Dec. 29
Jan. 14. Pumping engine, Kansas City, Mo. ..... Dec. 15
Advertised, Eng. News, Dec. 15 and 22.
Jan. 14. Water pipe, Savannah, Ga. ..... Dec. 8
Jan. 14. Water pipe laying, Sandusky, O. ..... Dec. 8
Jan. 15. Water-works and sewers, Louisburg, N.C. ..... Jan. 5
Jan. 16. Water pipe, North Bay, Ont. ..... Dec. 8
Jan. 16. Water pipe, Los Angeles, Cal. ..... Jan. 12
Jan. 19. Water and sewer mains, San Diego, Cal. ..... Jan. 5
Jan. 21. Water pipe, Lindsborg, Kan. ..... Jan. 12
Jan. 23. Water-works, sewers, Louisburg, N. C. ..... Dec. 29
Advertised, Eng. News, Dec. 29 and Jan. 6.
Jan. 24. Artesian well, Dallas, Tex. ..... Jan. 5
Advertised, Eng. News, Jan. 5 and 12.
Jan. 25. Water-works, Deadwood, S. Dak. ..... Dec. 15
Advertised, Eng. News, Dec. 15.
Jan. 25. Tapping cocks, etc., New York, N. Y. ..... Jan. 12
Jan. 25. Water-works, etc., Oxford, N. C. ..... Jan. 12
Advertised, Eng. News, Jan. 12.
Jan. 28. Boiler, tank, Denver, Colo. ..... Jan. 12
Jan. 28. Water system, Phoenix, Ariz. ..... Jan. 12
Feb. 1. Hydrants, New York, N. Y. ..... Jan. 12
Feb. 10. Water system, Bishop, Cal. ..... Dec. 15
Advertised, Eng. News, Dec. 8 to 29.

SEWERAGE.

Jan. 16. Sewers, Momence, Ill. ..... Jan. 5
Advertised, Eng. News, Jan. 5.
Jan. 16. Sewer system, Amarillo, Tex. ..... Dec. 22
Jan. 17. Sewers, paving, Collingswood, N. J. ..... Jan. 5
Jan. 17. Sewers, Jewett City, Conn. ..... Jan. 5
Jan. 17. Sewers, Collingswood, N. J. ..... Jan. 5
Jan. 18. Sewers, Brooklyn, N. Y. ..... Jan. 5
Jan. 19. Sewers, San Diego Cal. ..... Jan. 5
Jan. 19. Sewer system, Iola, Kan. ..... Dec. 29
Jan. 19. Sewers, Toledo, O. ..... Jan. 12
Jan. 19. Sewer, brick, Washington, D. C. ..... Jan. 12
Advertised, Eng. News, Jan. 12.
Jan. 19. Sewer system, San Diego, Cal. ..... Jan. 12
Jan. 24. Sewers, Riverside, Cal. ..... Jan. 5
Jan. 26. Sewers, Coldwater, Mich. ..... Jan. 5
Advertised, Eng. News, Jan. 5 and 12.
Jan. 30. Sewage disposal system, Wash., D. C. ..... Jan. 12
Advertised, Eng. News, Jan. 12.
Jan. 31. Sewers, water pipe, etc., New Orleans, La. ..... Nov. 24
Advertised, Eng. News, Nov. 24 to Jan. 19.
Feb. 1. Sewers, Cresco, Ia. ..... Dec. 29
Feb. 1. Sewer system, Palatka, Fla. ..... Jan. 12
Advertised, Eng. News, Jan. 12 to 26.
Feb. 7. Sewer, Los Angeles, Cal. ..... Jan. 5
Feb. 10. Sewer system, Bishop, Cal. ..... Dec. 15
Advertised, Eng. News, Dec. 8 to 22.
Feb. 15. Sewer system, Lunenburg, N. S. ..... Jan. 12

STREETS AND ROADS.

Jan. 12. Road, gravel, Bloomfield, Ind. ..... Jan. 5
Jan. 13. Asphalt repair plant, Omaha, Neb. ..... Dec. 15
Jan. 14. Paving, Orrville, O. ..... Dec. 29
Jan. 16. Paving, brick, Louisville, Ky. ..... Jan. 5
Jan. 16. Paving, etc., Atlantic City, N. J. ..... Jan. 5
Advertised, Eng. News, Jan. 5.
Jan. 16. Paving, Knox, Ind. ..... Dec. 29
Jan. 17. Paving, asphalt, New York, N. Y. ..... Jan. 5
Jan. 17. Macadamizing, Collingswood, N. J. ..... Jan. 12
Jan. 18. Paving, Cincinnati, O. ..... Jan. 5
Jan. 21. Macadamizing, Emeryville, Cal. ..... Jan. 5
Jan. 21. Macadamizing, Sussex, N. J. ..... Jan. 5
Advertised, Eng. News, Jan. 5 to 26.
Jan. 22. Road, shell, Fort Mott, N. J. ..... Jan. 12
Jan. 25. Paving, brick, Cleveland, O. ..... Jan. 12
Jan. 26. Paving, etc., Cortland, N. Y. ..... Jan. 12
Advertised, Eng. News, Jan. 12.
Jan. 31. Road, Harrisburg, Pa. ..... Jan. 12
Feb. 7. Paving, brick, Webb City, Mo. ..... Jan. 12
Advertised, Eng. News, Jan. 12 and 19.
Feb. 7. Roads, Rensselaer, Ind. ..... Dec. 29
Feb. 14. Road, Napa, Cal. ..... Dec. 29

MISCELLANEOUS CONTRACTS.

Jan. 12. Anchors, Tompkinsville, N. Y. ..... Jan. 5
Jan. 12. Armor, Washington, D. C. ..... Jan. 5
Jan. 14. Dike, Mare Island, Cal. ..... Dec. 8
Jan. 14. Drainage work, Pana, Ill. ..... Dec. 29
Jan. 16. Dynamite, explosives, Wash., D. C. ..... Dec. 15
Advertised, Eng. News, Dec. 15 to Jan. 18.
Jan. 16. Garbage collection, Lakewood, O. ..... Jan. 5
Jan. 16. Roller, stone crusher, etc., Ft Riley, Kan. ..... Jan. 12
Jan. 17. Machine tools, Washington, D. C. ..... Dec. 22
Jan. 17. Motors, wire, etc., Washington, D. C. ..... Dec. 22
Jan. 18. Locomotive equipment, Washington, D. C. ..... Jan. 5
Advertised, Eng. News, Jan. 5 and 12.
Jan. 18. Plumbing materials, etc., Wash., D. C. ..... Jan. 5
Jan. 18. Lumber, New York, N. Y. ..... Jan. 12
Jan. 19. Railway tracks, etc., New York, N. Y. ..... Jan. 5
Jan. 19. Oil fuel plant, Springfield, Mass. ..... Jan. 5
Jan. 20. Hand carts, etc., Jeffersonville, Ind. ..... Jan. 5
Jan. 20. Ry. const'n, Guthrie, Fairview & Western. ..... Dec. 22
Jan. 21. Switchboard, Washington, D. C. ..... Jan. 5
Jan. 24. Machinery, Washington, D. C. ..... Dec. 22
Jan. 24. Iron and lumber, New York, N. Y. ..... Jan. 12
Jan. 24. Arc lamps, rope, pipe, etc., Wash., D. C. ..... Jan. 12
Jan. 24. Piles, Washington, D. C. ..... Dec. 29
Jan. 25. Cypress ties, Washington, D. C. ..... Dec. 29
Jan. 25. Dredging, New Orleans, La. ..... Dec. 8
Jan. 26. Breakwater, Toronto, Ont. ..... Jan. 5
Jan. 26. Rails, fishplates, etc., South Africa ..... Jan. 12
Jan. 28. Boiler plant, West Point, N. Y. ..... Jan. 12
Advertised, Eng. News, Jan. 12 to Feb. 2.
Jan. 31. Cement, granite, etc., Washington, D. C. ..... Jan. 5
Jan. 31. Stone, Portland, Ore. ..... Jan. 5
Advertised, Eng. News, Jan. 5 to Feb. 2.
Feb. 1. Stripping, St. Clair, O. ..... Jan. 12
Advertised, Eng. News, Jan. 12 to Feb. 2.
Feb. 3. Driving piles, San Francisco, Cal. ..... Jan. 12
Advertised, Eng. News, Jan. 12 to Feb. 2.
Feb. 3. Dredging, Savannah, Ga. ..... Jan. 5
Advertised, Eng. News, Jan. 5 to Feb. 2.

Information concerning contracts to be let or supplies to be furnished, and corrections of errors and omissions in published items, are invited. Full details regarding the equipment, tools, etc., required for the proposed improvements are specially desired.

Feb. 4. Shears, Washington, D. C. ..... Jan. 5
Feb. 4. Latrine, Charleston, S. C. ..... Jan. 12
Feb. 4. Dredging, docks, Chicago, Ill. ..... Jan. 12
Advertised, Eng. News, Jan. 12 to Feb. 9.
Feb. 6. Sale of boilers, Boston, Mass. ..... Jan. 12
Advertised, Eng. News, Jan. 12 to Feb. 9.
Feb. 6. Machinery, Washington, D. C. ..... Jan. 12
Advertised, Eng. News, Jan. 12.
Feb. 7. Wharf repairs, Fort Totten, N. Y. ..... Jan. 12
Advertised, Eng. News, Jan. 12 to Feb. 9.
Feb. 8. Dam and bridges, Phoenix, Ariz. ..... Dec. 1
Advertised, Eng. News, Dec. 1 to Feb. 5.
Feb. 11. Pier extension, dredging, etc., Ireland ..... Jan. 12
Feb. 15. Dredging, Chicago, Ill. ..... Dec. 15
Advertised, Eng. News, Dec. 15.
Mar. 6. Electric tramcars, etc, South Africa ..... Jan. 12
Mar. 15. Dam, Los Angeles, Cal. ..... Jan. 12
Advertised, Eng. News, Jan. 12 to Feb. 23.
Mar. 31. Electric railway, China ..... Oct. 20
Advertised, Eng. News, Oct. 20 to Dec. 29.
Apr. 1. Dredging, Sweden ..... Nov. 24
May 1. Light house, Egypt ..... Dec. 22
No date. Stone crushing, Albany, N. Y. ..... Jan. 5
Advertised, Eng. News, Jan. 5.

RAILWAYS.

The names of parties awarded contracts are printed in capital letters.

BOSTON & MAINE.—Franklin County Commissioners will give a hearing Jan. 24 at Greenfield, Mass., on petition of the Connecticut River Railroad, controlled by the B. & M., to build a branch line from the main line south of Cheapside to East Deerfield, a mile or more, connecting with the Fitchburg division.

BRATTLEBORO & WHITEHALL.—Brattleboro, Vt., report credits J. E. Dalrymple, Gen. Freight Agt., Central Vermont Ry. Co., with statement that the B. & W., a narrow-gage road, will be converted into a standard-gage line "if the New London road ever gets a clear title to the property." The line runs from Brattleboro, Vt., to South Londonderry.

CANADIAN PACIFIC.—A report from Montreal Que., states that this company will double track its line between Fort William and Winnipeg, 425 miles. Construction work will be started next summer.

CHARLESTON TERMINAL CO.—It is reported that improvements are under consideration. W. E. Huger, Charleston, S. C., is Pres. The company operates nine miles of railway.

CHICAGO & ALTON.—New terminals are planned for Kansas City. About $200,000 will be spent for temporary improvements, according to reported statement of C. A. Goodnow, Gen. Mgr., at Chicago.

CHICAGO, MILWAUKEE & ST. PAUL.—A committee, comprising O. J. Moore, Secy. for the C. Shenkberg Co. and Treas. for Lindholm Furniture Co.; F. L. Eaton, Pres. of Sioux City Stock Yards Co.; L. L. Kellogg, Vice-Pres. and Gen. Mgr. of the Sioux City Gas & Electric Co.; O. O. Tolerton, Pres. of the Tolerton & Stetson Co.; John Hornick, Pres. of Hornick, Hess & More, and W. B. Palmer, of Palmer & Co., all of Sioux City, Ia., recently consulted with A. J. Earling, Pres. C., M. & St. Paul Ry., at Chicago, in connection with proposed extensions in South Dakota. One of the extensions is that of the Platte line from Platte to Orient, S. Dak. It is proposed to extend this line through Brule, Buffalo and Hand counties, touching Gann valley and crossing the Chicago & Northwestern line between Miller and St. Lawrence. D. J. Whittemore, Chicago, is Ch. Engr.

CHIPPEWA VALLEY & NORTHERN.—This line, now running from Atlanta to Camp Seven, Wis., will be extended to Raddison next spring and later will be extended to Hayward, to connect with the Ashland line of the Omaha road. The Chippewa Valley & Northern is owned and operated by Arpin Brothers, lumbermen, of Grand Rapids, Wis.

CINCINNATI, HAMILTON & DAYTON.—A special meeting of stockholders will be held Jan. 12, in Cincinnati, when action will be taken on the following propositions: To authorize an issue of $50,000,000 4% 50-year general mortgage bonds for general purposes, specifically to retire the issue of $25,000,000 refunding bonds authorized last summer, and to provide a means of expansion and addition for the new system. To authorize an outright lease of the Pere Marquette and all its properties. To ratify the purchase of 110,000 shares of Pere Marquette stock and the traffic agreement dated July 1, 1904. To ratify the purchase of $6,000,000 Pere Marquette refunding bonds recently resold to Redmond & Co. To authorize the lease of the Chicago, Cincinnati & Louisville and the guarantee of the bonds issued by the Pere Marquette for the purchase of this line. The control of the Cincinnati, Hamilton & Dayton system recently passed definitely to H. B. Hollins & Co. C. G. Waldo, Gen. Mgr., and F. H. Short, Treas., at Cincinnati.

DULUTH, ST. CLOUD, GLENCOE & MANKATO.—Local capital will be subscribed to build this railway from Albert Lea to Mankato, Minn., 52 miles. E. L. Tobie & Co., of New York, and the Eastern Construction Co., of Mankato, have submitted proposals covering construction of road. William H. Fisher, of St. Paul, is interested.

DULUTH, SOUTH SHORE & ATLANTIC.—It is reported that an extension will be built across Northern Minnesota and northern part of North Dakota. H. J. Payne, Marquette, Mich., is Ch. Engr.

EASTERN WASHINGTON.—W. S. Foster, corner Monroe St. and Broadway, Spokane, Wash., writes us that preliminary survey has been made. The road will be 35 miles long, extending from Connell, Wash., to Fletcher. Right-of-way has been secured for distance of 15 miles. Company expects to haul about 2,500,000 bushels of wheat, which are tributary to the line. Contracts will be let about Feb. 15. Mentioned on Dec. 29. J. J. Hughes, Spokane, is Ch. Engr. W. S. Foster and E. W. Swanson are trustees.

GEORGIA.—The plant and assets of the Georgia Car and Manufacturing Co., Savannah, Ga., which went into bankruptcy several months ago, will be sold at auction by the trustee in bankruptcy, the Savannah Trust Co., at an early date. It is estimated to be worth from $200,000 to $250,000.

GRAND TRUNK.—Press report from London, England, states that at a special general meeting of the shareholders presided over by Sir Charles Rivers Wilson, it was agreed to guarantee the issue of $7,500,000 4% gold bonds for the construction of the Lake Superior branch of the road.

GRAND TRUNK PACIFIC.—J. W. HUFF and C. J. CARTER, of Edmonton, Alta., have been awarded a contract to supply the Grand Trunk Pacific Railway company with 100,000 railway ties for use in the construction of the western section of new transcontinental line. The ties are to be delivered at Battleford.

KENTUCKY.—Business men of Hopkinsville, Ky., have subscribed $18,000 to aid in the construction of a belt line around Hopkinsville to connect the Louisville & Nashville, Illinois Central and Tennessee Central roads. Engineers will make surveys at once. Estimated cost of road is from $30,000 to $40,000. The line would terminate at quarries of the H. E. Dalton Stone Co.

KENTUCKY MIDLAND.—Surveys have been run, it is said, for a line from Madisonville to Central City, Ky., 26 miles. M. M. Wheeler, Earles, Ky., may be interested.

MIDLAND VALLEY.—Construction work is said to have been resumed. The line is being built from Muskogee, Ind. T., northwest to Tulsa, 60 miles. About 20 miles have already been graded out of Tulsa. F. A. Molitor, Fort Smith, Ark., is Ch. Engr. and Gen. Mgr.

MUSCATINE NORTH & SOUTH.—Henry Jayne, Muscatine, has purchased this property. Reported price is $104,000, the purchaser to assume all indebtedness. Charles Howard was receiver.

NEVADA.—The narrow-gage mining road, running between Golconda and Adelaide, a distance of about 14 miles, is to be extended by the Glasgow and Western Mining Co., of Reno. Extension will be made to Kennedy, 40 miles. Surveys are being run.

NEW BRUNSWICK SOUTHERN.—Survey will be run from St. John, N. B., to New River Beach on Bay of Fundy. Extension also will be built to Calais, Me., with view of making direct connection with Boston. The entire system is to be improved generally. A contract for 150,000 ties has been placed with the MUSQUASH LUMBER CO. The steel bridges contracted for last fall with the DOMINION BRIDGE CO., Montreal, are all finished and will be put into place as soon as possible. H. H. McLean, St. John, N. B., is Pres. and Mgr.

NEW YORK, NEW HAVEN & HARTFORD.—C. S. Mellen, Pres., recently stated that it was planned to spend about $1,000,000 double-tracking the New Haven & Derby road. It is 11 miles long.

According to officers of the company the abolition of 47 grade-crossings in Bronx Borough, New York city, as proposed, will involve an expenditure by the company of about $7,000,000. The company pledges itself to begin the work on or before April 1, and to complete it within four years from that date. It agrees further to furnish a bond of $200,000 as a guarantee that it will fulfil the terms of this agreement. In return the city will grant company the right to close and occupy Cypress Ave., between the northerly line of its yards and the bulkhead line of Bronx Kills, a distance of 320 ft.

NEW YORK CENTRAL & HUDSON RIVER.—Thirteen civil engineers, employed by the New York Central & Hudson River Railroad, are reported to have located at Nepaug, Conn., preparatory to surveying a proposed double-track line for this road, between Brewster, N. Y., and Springfield, Mass. The original survey of the old Connecticut Western road will be followed closely, it is reported.

OVERTON COUNTY.—Construction work will begin on this road early in the spring from Algood on the Tennessee Central to Livingston, Tenn., 17.2 miles. It is proposed to build on from Algood to a connection with the Cincinnati Southern, 68 miles. W. J. OLIVER & CO., of Knoxville, Tenn., are the contractors. Justice Cox, Jr., & Co., Land Title Bldg., Philadelphia, are reported interested. E. C. Knight, Livingston, Tenn., is Gen. Counsel.

PENNSYLVANIA.—It is reported from Philadelphia that orders for steel rail requirement of the Pennsylvania Railroad Co. for its lines east and west of Pittsburg for the year 1905, amounting to 102,700 tons, have been placed as follows: United States Steel Corporation, 55,500 tons; Lackawanna Steel Co., 7,000 tons; Cambria Steel Co., 20,100 tons, and Pennsylvania Steel Co., 20,100 tons. The company will pay $28 a ton for the rails. The tonnage ordered is about one-half of that ordered last year.

A branch line may be built from Lakewood to Whitings, 18 miles.

PORTAGE ROAD.—As announced last week, NELSON & WHITE, of Seattle, have contract for construction of this railway. Other bids received were as follows: Robert Wakefield, $135,000 on a quantity price basis, without rails. Smyth & Howard, $200,000 on a quantity price basis. Joseph Paquet, $145,000, without rails; $196,000 complete, both based on the quantity of materials used. Nelson & White, $115,523 without rails, rolling stock or locomotives. McCabe Construction Co., on equipment, $32.75 per ton for rails; locomotives, $6,500 each; flatcars, $410 each; boxcars, $625 each. N. J. Blagen, $247,000, complete; $216,000 without rails; rejected because too high. J. K. Bentley, $176,000; rejected because not accompanied by forfeit check.

SOUTHERN.—This company, it is reported, will build extensions north and south from Greenwood, Miss., the northern line going to Memphis and the southern line to some point on the Gulf, possibly Biloxi, Miss., making a line about 275 miles long. W. H. Wells is Engr. of Construction, Washington, D. C.

It is reported that bids will be received for construction of an extension from Mobile Junction, Ala., to a point in Birmingham district west of Bessemer.

ST. LOUIS & SAN FRANCISCO.—JAMES STEWART & CO., of Pittsburg, have been awarded a $2,000,000 contract for ship dock and terminals at Chalmette, La. See also under Miscellaneous Contracts.

TENNESSEE CENTRAL.—Company may build two extensions, one from Nashville to Birmingham, Ala., 120 miles, and the other from Crossville to Pikeville, Tenn., and across Walden's Ridge and through Alex Gap, into Chattanooga. L. F. Lounbladt, Nashville, Tenn., is Engr. of Construction.

TENNESSEE.—It is reported that J. R. RHODES & CO., of Knoxville, have been awarded a contract to build 12 miles of railroad for the Wentz Co. of Big Stone Gap, Va. J. L. McGIMPSEY also of Knoxville, is a subcontractor. JAMES McDOWELL, of Knoxville, is said to be associated with the other contractors.

NEW INCORPORATIONS AND CHARTERS.

BINGHAMTON & SOUTHERN.—N. Y.—The charter granted by the Railroad Commission of New York to this company has been sustained by the Supreme Court. The Erie Ry. sought to have it annulled. The road is to run from Binghamton, N. Y., to Ansonia, Pa.

DYERSBURG NORTHERN.—Tenn.—Company has incorporated to build a railroad from Dyersburg to Tiptonville, 30 miles. Incorporators: R. M. Hall, Charles A. Hall, George T. Weakley, J. C. Doyle and W. H. Rupe of Dyersburg. Capital, $10,000.

GRANITE CITY, ST. LOUIS & EASTERN BELT.—Ill. Incorporated to operate a belt railway at Granite City. F. G. Niedringhaus, H. F. Niedringhaus and William F. Niedringhaus, of St. Louis, Mo., and W. W. Hanlon and C. F. Stelzel, of Granite City, Ill., are incorporators.

DOVER & SOUTHBOUND.—N. C.—A company will be incorporated, with capital of $100,000, to build a railway from Dover via Jacksonville and Maysville to Swansboro, and from Dover, west, to Kinston, N. C.

KANSAS SOUTHERN & GULF.—Me.—With capital stock of $1,000,000, this company has been incorporated in Maine. I. L. Fairbanks, of Augusta, is Pres. and Treas.; L. A. Burleigh, H. R. Thompson and J. Berry, of Augusta; J. E. Smith and O. J. Collman, of Beatrice, Neb., are directors.

KANAWHA & PENNSYLVANIA.—W. Va.—Charter has been granted this company to build from Pittsburg to Charleston, W. Va. It is reported that line will be built "from the mouth of Blue creek to Elk river and thence to West Charleston, connecting at Elk river with the Imboden & Odell Railroad." W. A. MacCorkle, of Chilton, MacCorkle & Chilton, at Charleston, is interested.

NEWHOUSE, COPPER GULCH & SEVIER LAKE.—Utah.—Incorporated to build a railroad from Newhouse to a point in Copper Gulch and thence northeast through Beaver County to Sevier Lake in Millard County, 20 miles. Capital stock, $50,000. Incorporators: Samuel Newhouse, Lafayette Hanchett, Alfred J. Bettles, Maurice M. Johnson and Henry L. Irwin. Headquarters, Salt Lake City, Utah. Estimated that railway will cost $12,000 a mile to build.

OKLAHOMA & NORTHWESTERN.—Okla.—A charter has been granted this company to build a railroad from Elk City through Day, Roger Mills, Woodward and Beaver counties, with a branch from Beaver south to the north bank of the south fork of Red River near Sayre, a total distance of 75 miles. Capital stock, $1,875,000. Incorporators: E. E. Neiss, L. N. Neiss, E. F. Krause, A. F. Colgren, of Chicago; J. H. Seamans and W. F. Pierce of Elk City. Estimated cost of railway is $1,500,000.

PARKERSBURG, POMEROY & WESTERN.—O.—Company has been incorporated to construct a line from a point in Washington County, opposite Parkersburg, W. Va., to Toledo, O., through Washington, Athens, Meigs, Gallia, Vinton, Ross, Fayette, Madison, Clark, Champaign, Logan, Ruglaize, Allen, Putnam, Henry, Wood and Lucas counties. Project is said to be financed. Work of construction may begin in the spring. Capital stock, $10,000. Incorporators: C. F. Evans, William Thornbaugh, J. K. Brandon, C. E. Bryan and F. L. Cooperider.

PENDLETON SOUTHERN.—Ore.—A charter has been given to this company to build a railroad from Pendleton, south to Pilot Rock and thence to the headwaters of Willow Creek in the Blue Mountains. Capital stock, $100,000. Dr. Charles J. Smith, Charles H. Carter, James R. Raley and T. C. Taylor, all of Pendleton, Ore., are the reported incorporators. Right of way for the new line is being secured. Line will be about 56 miles long.

SAN FRANCISCO, IDAHO & MONTANA.—Idaho.—This company, which proposes to construct a railroad from San Francisco to Butte, has been incorporated with headquarters in Boise, Idaho. Prominent financial men of Minneapolis, officials of the Western Surety Adjustment Co., and John A. McGinty, who has been engaged in preliminary work for the proposed road, are the incorporators. Capital stock, $50,000,000. The estimated length of the road is 1,000 miles.

ST. LOUIS, CABOOL & LITTLE ROCK.—Mo.—Incorporated to build a railroad from Cabool, Texas County, northeast via Houston to Salem, Dent County, 54 miles. Capital stock, $540,000. Edward L. Reel, Edwin L. Shanks and William E. Vaughan, of Springfield; Silas W. Grant, Charles B. Davis, of Cabool; Albert Parmenter and Louis C. Schlief, of Houston, are incorporators.

WILSON NORTHERN.—Ark.—A charter has been obtained by this company to build a railroad from Wilson to Keiser, in Mississippi county, ten miles. The road will handle lumber business principally. The incorporators are: M. J. Blackwell, E. H. Green, J. H. Elkins, J. W. Johnson, H. S. Portis, O. M. Hill, W. L. Harrison, John Mulroy, Charles T Coleman and R. E. Lee Wilson. The line has been located and all maps and profiles filed. Capital stock, $100,000, all of which has been subscribed. The directors are: M. J. Blackwell, Wilson; E. H. Green, Wilson; J. H. Elkins, Armorel; Charles T. Coleman, Little Rock, and R. E. Lee Wilson, Memphis.

STREET AND ELECTRIC RAILWAYS.

The names of parties awarded contracts are printed in capital letters.

CHESHIRE, CONN.—A. M. Young, of Branford, Pres. Connecticut Railway & Light Co., is reported as stating that his company will build trolley road between Cheshire and Milldale in the early spring.

NAUGATUCK, CONN.—It is announced that work on the construction of the street railway which the Naugatuck Valley Electric Co. proposes to build between Naugatuck and Seymour will be commenced next spring. The route runs through Beacon Falls. The Naugatuck Electric Co. is closely affiliated with the Connecticut Railway & Lighting Co. Preliminary surveys have been completed.

WILLIMANTIC, CONN.—The next Legislature will be asked to grant a charter for an electric railway from Willimantic to Stafford, passing through Eagleville, Mansfield Depot, Merrow, and other towns.

CAMBRIDGE SPRINGS, PA.—It is reported that a trolley line will be built connecting Cambridge Springs, Erie and Pittsburg. Cost, $1,500,000. Murray A. Verner, J. M. Guffey and Julian Kennedy, all of Pittsburg, are interested.

TAMAQUA, PA.—The Mahanoy City & Tamaqua Traction Co., care of E. M. Shepp, Tamaqua, will soon have plans started for an electric railway from Tamaqua to Mahanoy. Bids on construction will probably be taken in the spring.

BERWICK, PA.—F. W. Darlington, Engr., Real Estate Trust Bldg., Philadelphia, will soon start plans for an electric railway from Berwick to Nanticoke, Pa. Bids will soon be taken.

BLOOMSBURG, PA.—The Bloomsburg & Milville Street Ry. Co. will soon have plans started for a line from Bloomsburg to Millville, Pa. F. W. Darlington is Engr.

RICHMOND, VA.—Press reports state that Frank Jay Gould will invest $5,000,000 in the building of a 200-mile trolley system from Richmond to Ashland.

CHARLESTON, W. VA.—The Coal River Ry. Co., of Charleston, has been chartered to build and operate a railroad from Point Pleasant to St. Albans and thence to Bramwell. Capital $2,000,000. Incorporators: A. C. MacCorkle, Henry Fry, G. O. Chilton, M. M. Williams, Samuel Stephenson, Charleston, W. Va.

TAMPA, FLA.—City Council has granted a franchise for construction of a street railway, which covers the principal streets in eastern portion of town, and on to Ybor City and Sulphur Springs. Prospectors of new road are: W. Smith, C. E. Ball, W. B. Gray and Geo. C. Warren.

HENDERSON, KY.—An electric railway line between Henderson and Owensboro, Ky., is being planned by W. Richardson, Secy., Henderson Electric Road, and H. Randall, of Cincinnati, who has secured a franchise for a road from Evansville, Ind., to Henderson. Work will probably be started in early spring.

WILMINGTON, O.—W. D. Riddell, chief promoter, states the arrangements have been completed for financing the proposition, and that the road will undoubtedly be built next spring. It will extend from Wilmington to Hillsboro, a distance of 20 miles. At Hillsboro connection will be made with a line to Cincinnati.

INDIANAPOLIS, IND.—The Consolidated Traction Co. has increased its capital stock from $300,000 to $1,500,000 to complete the construction of road. The road will be continued west to Covington and Danville. A spur will also be built to Almo and to coal fields near by. Grade between this city and Crawfordsville is ready for ties and rails.

MILWAUKEE, WIS.—Survey is being made of right of way for Milwaukee Street Ry. Co. from Waukesha to Oconomowoc. Work on the extension will beg'n in the spring.

LA CROSSE, WIS.—It is announced that the La Crosse & Southeastern Ry. Co. is planning to extend its line from Viroqua to Madison next spring.

HANNIBAL, MO.—City Council has granted a franchise to Missouri & Illinois Interurban Electrica Railroad Co.

VAN BUREN, ARK.—The Van Buren Electric Railway & Bridge Co. has been incorporated here with $500,000 cap. stock, three-fifths of which has been subscribed. The company proposes to build a railroad, electric railway, highway and toll bridge over Arkansas River, and to operate an interurban electric railroad between Van Buren, Alma Dyer and Mulberry, in Crawford County. Phil. D. Scott, Natl. World's Fair Comr., is Pres.

MINERAL WELLS, TEX.—City Council has granted a franchise to W. L. Crawford and W. H. McGrath to construct a street railway here. Work on preliminaries, etc., will be commenced at once.

GUTHRIE, OKLA.—Ground has been broken for construction of street railway system which is being financed through the efforts of John Shartel, of Oklahoma City. Contract for grading has been let to MIKE CASSIDY, of Guthrie.

FOREST GROVE, ORE.—Council has granted a franchise for an electric railway line from this city to Portland via Hillsboro.

SANTA CLARA, CAL.—The Santa Clara Interurban Ry. Co. has been incorporated by J. C. Campbell, W. H. Netson, J. E. Parkinson and others. Capital stock $5,000,000. The plan of the company is to extend its line from San Mateo to Alum Rock Park, in Santa Clara County, running through Redwood City, Menlo Park, Palo Alto, Mayfield, Mountain View, Sunnyvale, Santa Clara and San Jose.

SAN DIEGO, CAL.—San Diego Electric Ry. Co. has applied for a franchise for the extension of its lines from State and D Sts. along State to Ivy, thence to India, along India to Old Town, a distance of about four miles, and if secured construction work will commence immediately. C. McLegan is Ch. Engr.

SALT LAKE CITY, UTAH.—The Utah Light & Ry. Co. is planning to extend its system to Bingham Junction and Sandy in the early spring.

HAMILTON, ONT.—The Hamilton, Ancaster & Brantford Electric Ry. Co. has let contract to HAINES BROS. of New York, for building the road.

ST. JOHN, N. B.—It is proposed to spend $50,000 for improvements on the St. John Street Railway.

LIGHT, HEAT AND POWER PLANTS.

The names of parties awarded contracts are printed in capital letters.

TURNERS FALLS, MASS.—A gas plant may be built here by a New York syndicate. G. T. Thomas, interested in a trolley line from Orange to Millers Falls, is mentioned in connection with the project. It is estimated that $100,000 would be expended in the event of the enterprise materializing, and that pipes would be extended to Millers Falls and Montague City.

BOSTON, MASS.—Common Council has passed an ordinance authorizing city "to construct or lease or maintain within its limits one or more plants for the manufacture and distribution of gas and electricity for furnishing light for municipal purposes, or light, heat and power (except for the operation of electric cars)." The Board of Aldermen, on Jan. 9, passed this ordinance. Steps will now be taken toward securing plans, etc.

PITTSFIELD, MASS.—The Pittsfield Street Railway Co. will build a power plant, it has been announced.

WEBSTER, MASS.—The Consolidated Railway Co. has purchased a site for proposed brick power sub-station here for its Worcester & Connecticut Eastern division. The WESTINGHOUSE-KERR CO., of New York, has contract for construction and equipment.

NORWICH, CONN.—Next General Assembly will be petitioned by G. O. Jackson, E. W. Higgins and C. W. Comstock for the right, under the name of the Uncas Power Co., "to manufacture, generate, transmit, deliver and sell electricity for any and all purposes," in Norwich and New London. The plant is to be located here.

DANBURY, CONN.—A charter is sought by the Danbury Power Co. to establish a power plant on Still River at Brookfield and New Milford to transmit electricity to Danbury, Bethel, Brookfield, Redding and Ridgefield. Charles H. Merrit, S. C. Holley, M. H. Griffing, B. A. Hough and A. N. Wildman are interested. A dam would be erected in Rock River at New Milford and in Still River at Lanesville and Brookfield.

MANCHESTER, CONN.—Judge John E. Fisk, of Rockville, will incorporate a company to operate and build a gas plant here.

OSWEGO, N. Y.—Contract for city lighting, for five years, has been awarded to the PEOPLE'S GAS & ELECTRIC CO. John C. Knight is company's local representative.

NEW YORK, N. Y.—The Northern Westchester Light & Power Co. will light streets, public places, private buildings and supply electric power in Cortlandt, New Castle, Ossining, Pleasantville, Briar Cliff Manor, Croton and Tarrytown, it is reported. As noted in issue of Dec. 22.

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the company has been incorporated with a capital of $5,000 by R. S. Hull, of Brooklyn; Alexander S. Andrews, Flushing, and John Larkin, of New York City.

PALMYRA, N. Y.—The taxpayers of this city will vote on Jan. 13 on the proposition of buying the Palmyra electric plant.

SPRING LAKE, N. J.—The date for receiving bids for furnishing and installing 150-HP. marine type boiler, air compressor, feed-water heater, boiler feed pump steam separators, etc., has been extended from Jan. 10 to Jan. 17. Specifications for above work are on file at office of Engineering News, 220 Broadway, New York. (Advertised, Engineering News.)

HAMMONTON, N. J.—The Hammonton Electric Light Co. of Hammonton, has been incorporated to generate and distribute electric current for light, heat and power. Capital, $50,000. H. E. Woodman, C. E. Starr and F. P. Reed, of Hammonton, are reported incorporated.

JERSEY CITY, N. J.—The Michigan Light Co. was incorporated to operate works for the generation of gas, etc. Capital, $2,250,000. The incorporators are: Walter F. Mahony, Walter Thiele and Charles N. King, all of Jersey City.

PATERSON, N. J.—THE WEEHAWKEN CONSTRUCTION CO. has been awarded city lighting contract for term of five years. It is a new company.

NEW MILFORD, PA.—The New Milford Power & Light Co., mentioned on Dec. 22, will expend $4,500 in improvements. Bids will be taken at once, it is stated by A. E. Snyder, a reported incorporator.

TAMAQUA, PA.—The People's Gas Co. has been granted a franchise to erect a gas plant. Plans will be prepared by F. V. Curtis, Engr., 222 South Third St., Philadelphia.

F. W. Darlington, Engr., Real Estate Trust Bldg., Philadelphia, will prepare plans for an electric plant at this place for J. F. McGinty. It is stated that "an entire line of equipment will be required."

PHILADELPHIA, PA.—It is reported that the THOMPSON-STARRETT CO., 49 Wall St., New York, has been awarded the contract for a power house at 13th and Ludlow Sts., for John Wanamaker, to be used in connection with department store now in course of construction. Brick, stone and steel, fireproof. Cost, $200,000. D. H. Burnham & Co., 1307 Market St., are Archs.

SHAMAKIN, PA.—F. W. Darlington, Real Estate Trust Bldg., Philadelphia, is reported to be receiving bids on an electric plant for the Shamakin & Coal Township Light, Heat & Power Co.

WILMINGTON, DEL.—It is reported that the City Council will petition the legislature for permission to borrow $200,000 for the construction of a municipal electric light plant; $200,000 for a new city hall, and $400,000 for improving city streets.

MARTINSVILLE, VA.—C. B. Bryant, C. E., Martinsville, informs us that site and water power rights have been purchased by this town for a water power plant to be built at Smith's River Mills. $60,000 of municipal bonds have been issued; this is estimated cost of the plant. It will have capacity of 40 2,000-c. p. and 400 20-c. p. lights. Bids will be received in February. No equipment or construction work have been contracted for. J. R. Gregory is Cy. Engr.

OXFORD, N. C.—See under Water-Works.

ANDERSON, S. C.—J. D. Maxwell, Jr., of Spartanburg, S. C., is reported backer of project to build a gas plant here.

DILLON, S. C.—City has granted a franchise for operating light and water plants to A. N. Walker and associates of Philadelphia, Pa. This action will be submitted to a vote of the city for approval.

NEWNAN, GA.—Bonds to the amount of $20,000 have been sold. The electric light plant of the Newnan Light & Power Co. has been purchased. Improvements will be made. E. D. Fouse is Cy. Clk.

MARKSVILLE, LA.—City will purchase the private electric lighting plant and install a system of waterworks. Ira W. Sylvester, C. E., Alexandria, La., has been employed to prepare plans and specifications.

CLINTON, TENN.—The Rand Power Co., capital $175,000, has been incorporated by S. M. Leath, H. C. Hicks, C. J. Sawyer and W. R. Hicks.

JEFFERSON CITY, TENN.—It is reported that the Jefferson City Electric Light Co. will at once rebuild its electric light plant, reported destroyed by fire at a loss of $5,000.

COVINGTON, KY.—The city electric light plant will be rebuilt. The building and machinery were destroyed by an explosion on Dec. 27; loss about $12,000. Miles G. Turner, Mayor, has appointed J. F. Henderson, C. C. Brooks and J. L. Whitehead a committee to consider plans, etc.

CINCINNATI, O.—Announcement is made that the Cincinnati Gas & Electric Co. will expend $500,000 in extending and improving this service. Norman G. Kenan, Pres., states that $250,000 of this amount will be used in the West End. New gas mains and coal elevators are planned.

COLUMBUS, IND.—George Vorwald, Cy. Clk., writes us that bids are asked until Feb. 2 by Common Council for two 150-HP. boilers, designed for 150 lbs. working pressure; all necessary foundation work, brick settings, steam piping, smokestacks, etc., are to be included in contract. Specifications will be ready Jan. 14. W. H. Rights is Cy. Engr.

INDIANAPOLIS, IND.—The Indianapolis Light & Power Co. and the Marion County Hot Water Heat Co. were merged on Dec. 31. The capital of the combined organization is $1,000,000. A $5,000,000 bond issue is authorized. The new company will be known as the Indianapolis Light & Heat Co. The directors of the new corporation are: Daniel W. Marmon, Charles C. Perry, Volney T. Malott, Arthur C. Newby, Charles E. Test, Thomas Wynne and Charles N. Thompson. Mr. Wynne is Secy.

BAY CITY, MICH.—The power plant of the Ajax dynamite works, near this city, was burned recently; loss, $10,000, with no insurance. The engine and boiler and other machinery is said to have been destroyed.

Bay City Gas Co. has been granted a franchise to supply gas for heating and lighting purposes in West Bay City.

MUSKEGON, MICH.—George L. Erwin, Muskegon, Secy. Grand Rapids-Muskegon Water Power Electric Co., writes us that company has purchased equipment for constructing dams on Muskegon River, mentioned last week. Material to be used in construction has been purchased also.

CHICAGO, ILL.—The "Chronicle" states that bids were opened Dec. 24 by E. B. Elliott, Cy. Electrician, for street lighting, as follows: For maintaining 11,000 gas mantles in street lamps: Albert Whitfield, $2.40 ea. per year; Chicago Street Lighting Co., $3.12; Peerless Gaslight Co., $2.35. For repairing and painting 11,000 lamp-posts: John McLaughlin, 45 cts. ea.; Chicago Gaslight Co., 48 cts.; Peerless Gas Light Co., 51 cts. For maintaining 4,000 gasoline lamps: The American Development Co., $26.40 ea. per year. The Commonwealth Electric Co. bid $103 each on 530 street arc lamps which it has rented the city. The Chicago Suburban Water & Light Co. bid $102.50 for the 120 arc lamps it has rented the city.

QUINCY, ILL.—W. J. Ferris, of the General Electric Co., of Chicago, has purchased the plant of the Independent Light & Power Co., owned by J. W. Cassidy, of this city. The price paid was about $200,000.

MILWAUKEE, WIS.—The Milwaukee Coke & Gas Co., it is reported, will add 40 ovens to its present plant in Kinnickinnic Valley. Cost, $500,000. Other improvements contemplated by the company will bring the cost up to $2,000,000.

BRAINERD, MINN.—Dr. Werner Hemstead has asked Council for a 30-year franchise. If granted, he will erect a gas plant with capacity of 20,000 cu. ft. per day.

ST. PAUL, MINN.—Bids are asked until Jan. 21 for constructing an addition to electric system at Fort Snelling, Minn. R. M. Schofield, Q. M.

DULUTH, MINN.—It is stated in local papers that funds are now available for the construction of the power canal of the Great Northern Power Co. at Duluth. Tucker, Anthony & Co., of Boston and Charles D. Barney & Co., of New York and Philadelphia, will finance the project. The original bond issue provides for $3,600,000. Work will begin this winter. The initial plans call for development of 30,000 HP., to be increased later. THE NATIONAL RAILWAY CONSTRUCTION CO., of Boston, Mass., is reported to have secured the contract for building the canal. C. A. Duncan, of Duluth, is Pres. and Francis A. Cokefair is Ch. Engr.

CARLETON, NEB.—D. H. Kelso, A. E. Frasche and others, are reported interested in construction of waterworks and an electric light plant.

GERING, NEB.—G. L. Shumway, of Scotts Bluff, will erect a power plant on North Platte River near this town. He is at head of the Pathfinder Electric & Water Power Co. Plant will cost $85,000. Application has been filed for water appropriation. It is estimated that plant will have capacity of 400 HP.

FORSYTHE, MONT.—City has awarded 20-year contract to J. E. EDWARDS for lighting town with electricity.

CANADIAN, TEX.—J. F. Johnson has been appointed chairman of committee. Estimates are wanted at once for the construction of water-works and an electric light plant. W. D. Fisher, Secy. of Com.

MINERAL WELLS, TEX.—Mineral Wells Electric, Power & Heating Co., has been chartered with $50,000 capital, by D. G. Galbraith, of Mineral Wells; William D. Williams, of Fort Worth, Tex., and others, to supply light, heat and power.

KINGFISHER, OKLA.—Citizens' Gas, Light, Heat & Power Co. has been incorporated with $100,000 capital by E. E. Hull, C. C. Roberts, of Kingfisher, and J. B. Buckles, of Enid, Okla.

ABERDEEN, WASH.—Ninemire & Morgan Co. is stated to have petitioned for a franchise for an electric light and steam heating plant.

NORTH YAKIMA, WASH.—A 30-year franchise has been granted the Northwest Water & Light Co. by City Council. It is said that a new system is to be put in by the company. Water will be brought ten miles up Naches River.

RIVERSIDE, CAL.—Bids asked until Jan. 24 by Commissioner of Indian Affairs, Dept. Interior, Washington, D. C., for furnishing material and constructing extensions to water, sewer and electric lighting systems at Riverside School. For futher information apply to Harwood Hall, Supt. A. C. Tanner is acting-Comr. Affairs.

SAN FRANCISCO, CAL.—The Consolidated Heat, Light & Power Co. has been incorporated with a capital of $300,000 by Wm. Thomas, Mark L. Gerstle, Robert N. Frick and others. Company will not operate in this city. Lighting interests in smaller cities will be consolidated.

SAN DIEGO, CAL.—The United Light, Fuel & Power Co. has been incorporated with $500,000 to "construct, purchase, or otherwise acquire, maintain and operate electric light, fuel and gas plants in the state of California." Incorporators are: J. D. Spreckels, of San Francisco; W. Clayton, San Diego; C. T. Hinde, Coronado, Cal.; B. M. Warner, Coronado, and Harry L. Titus, National City, Cal. Principal office in San Diego.

RIVERSIDE, CAL.—W. F. Everett, H. Kuhl, H. E. Tallent, Marshall Lewis and J. S. Hunt have incorporated the Indio Light, Water & Ice Co. Capital stock, $30,000.

BRIDGES.

The names of parties awarded contracts are printed in capital letters.

GLOUCESTER, MASS.—We are informed that a bill has been introduced in the Legislature authorizing Essex County Commissioners to construct a new draw bridge with 40-ft. draw opening on Gloucester canal, cost not to exceed $35,000. Winslow L. Webber is Cy. Engr.

NORWALK, CONN.—Local press reports state that bid will soon be advertised for constructing a new stone arch bridge at Belle Island. Chas. N. Wood is Engr. Est. cost, $7,500.

ALBANY, N. Y.—We are informed that the contract for constructing a bridge over Seneca River at Cold Spring was awarded to the KING BRIDGE CO., 277 Broadway, New York, for $18,431. Bids opened Dec. 27.

NEW YORK, N. Y.—Bids are asked by Geo. E. Best, Comr. of Bridges, until Jan. 19, 2 p. m., for construction of railway tracks and stairways and the reconstruction of expansion joints on bridge over Newtown creek, in Borough of Brooklyn.

LATROBE, PA.—Bids were opened Dec. 29 by County Commissioners for constructing a bridge over Loyalhanna creek. Bids were from $11,500 to $22,000. We are informed that contract has not been awarded, and that all bids will probably be rejected.

HARRISBURG, PA.—We are informed that Nelson & Buchanan Co., Chambersburg, are the lowest bidders, at $12,890, for rebuilding bridge across Penn's creek, Union County. J. M. Shumaker is Supt. Pub. Grds. and Bldgs.

Information concerning contracts to be let or supplies to be furnished, and corrections of errors and omissions in published items, are invited. Full details regarding the equipment, tools, etc., required for the proposed improvements are specially desired.

STROUDSBURG, PA.—County Commissioners will soon have plans started for a steel bridge at this place; also for a new steel bridge in Chestnut Hill Township. Bids will soon be taken.

WASHINGTON, D. C.—W. J. Douglas, Bridge Engr., District Bldg., informs us that plans are being prepared for a new bridge over Anacostia River, but no money is yet available for construction. Cost, $250,000.

VICKSBURG, MISS.—We are informed that the contract for constructing steel bridge on Road No. 1 was awarded to W. T. YOUNG BRIDGE CO., Nashville, Tenn., for $2,550.

SHREVEPORT, LA.—The Cotton Belt Ry. Co. is preparing to construct a drawbridge across Red River here. Judge M. L. Lynch is Ch. Engr., Tyler, Tex.

ASHLAND, O.—It is announced that the Cincinnati, Hamilton & Dayton R. R. Co. is planning to bridge the Ohio River at either Ashland or Huntington, W. Va. Cost about $1,000,000. C. A. Wilson is Ch. Engr., Cincinnati.

BRYAN, O.—The Toledo & Indiana Ry. Co. has practically completed track-laying for its new extension to Bryan. A steel bridge will be erected over Tiffin River, near here.

CINCINNATI, O.—Frank Krug, County Engr., is stated to have estimated the cost of constructing an electrical lift bridge over canal at Benson St., Lockland, at about $24,814, and, according to reports, he was authorized to prepare plans and specifications for structure.

CLEVELAND, O.—West Virginia Bridge Co., at $1,425, was low bidder Jan. 4 for constructing steel bridge at Newburg, and Ohio Construction Co., at $873, was low bidder for constructing abutments at Brooklyn. W. H. Evers is County Surv.

TOLEDO, O.—Bids are asked by Lucas County Commissioners until Jan. 19 for constructing substructure and superstructure of bridge on Clark Ave. Specifications on file in office of County Surveyor. D. T. Davies, County Audr.

INDIANAPOLIS, IND.—Contract for temporary wooden trestle bridge over White River at Morris St. has been let by Board Public Works to M. M. DEFREES. Cost, about $9,000.

NOBLESVILLE, IND.—Commissioners of Hamilton and Marion Counties will soon invite bids for construction of a bridge across Williams creek, on county line. The bridge will be built jointly.

PONTIAC, MICH.—It is reported that bids will be received by Jan. 23 by Common Council for $16,000 bonds, $13,000 of which to be used for reconstructing seven wooden bridges.

CHICAGO, ILL.—It is stated that the contract for constructing Archer Ave. bridge has been awarded to the following: Substructure, FITZSIMMONS-CONNELL CO., Tacoma Bldg., $61,324; superstructure, ROEMHELD-GALLERY CO., 719 Chamber Commerce Bldg., $83,980.

APPLETON, WIS.—Contracts for two stone bridges in Vanderbroeck were awarded to HENRY SPRIESTER for $3,597; and H. KEEPER, of Seymour, was awarded contract for Kaukauna bridge, at $2,250.

MUSCATINE, IA.—Bids are asked by A. S. Lawrence, County Audr., until Feb. 7 for furnishing of steel bridges to be erected in Muscatine County during the year ending Feb. 4, 1906.

MINNEAPOLIS, MINN.—We are informed that bids will be received by the Minneapolis, St. Paul & Sault Ste. Marie R. R. Co. until Jan. 15 for constructing a bridge over Mississippi River here. The work will consist of six 110-ft. lattice deck girders and one 126-ft. lattice deck girder, on concrete piers. Thos. Green, City, is Ch. Engr.

ST. PAUL, MINN.—Bids were received by city officials Jan. 3 for reconstructing portion of "High Bridge." The bids for the work were taken in three ways, the St. Paul Foundry Co., at $62,955 and $59,091, respectively, being low bidder on the first and second methods, and A. F. Bayne & Co., at $69,504, was low bidder on the third method. Itemized bids will be given under Contract Prices Jan. 19. L. R. Rundlett is Cy. Engr.

TOPEKA, KAN.—It is reported that bids are being received until Feb. 6 for constructing six bridges. James F. McCabe is Cy. Engr.

PLATTSMOUTH, NEB.—Bids are asked by L. A. Tyson, County Clk., until Jan. 14, 11.30 a. m., for building all bridges that may be ordered by County Commissioners for one year.

LINNIUS, MO.—We are informed that T. L. McMichael, Bridge Comr., has contracted with McCOHN & VERNON, of Lewistown, Mo., for eleven steel bridges.

KELSO, WASH.—Secretary of War has given permission to Kelso Bridge Co. to construct a bridge across Cowlitz River here. Work will be started as soon as plans and specifications can be made and contracts let.

SEATTLE, WASH.—Street Committee has definitely decided to build a new bridge on University St. R. H. Thomson is Cy. Engr.

SANTA BARBARA, CAL.—Bids are asked by C. A. Hunt, Clk. Brd. of Supervisors, until Feb. 6, for constructing a bridge over Sisquoc River.

BUILDINGS.

The names of parties awarded contracts are printed in capital letters.

TUFTS COLLEGE, MASS.—A gift of $100,000 to Tufts College by Andrew Carnegie has been announced. Erection of a college library is considered. Elmer Hewitt Capen, D. D., may be addressed.

NEW LONDON, CONN.—New London Manual Training and Industrial School has accepted plans submitted by Donnelly & Hazeltine, local architects, for new buildings to cost about $50,000. Committee is composed of Frederick S. Newcomb, George Whittlesey and L. E. Whitop.

BRIDGEPORT, CONN.—For a new schoolhouse on Newfield Ave., and for three school additions, $65,000 will be asked for by Board of Education.

BROOKLYN, N. Y.—Plans have been prepared by C. B. J. Snyder, 500 Park Ave., Boro. Manhattan, Supt. Bldgs., Bd. Education, for an extension to the public school on Dumont Ave., between Powell and Sackman Sts. Brick, stone and concrete, structural iron, fireproof, electric wiring, etc. Estimated cost, $310,000.

CANANDAIGUA, N. Y.—Bids are asked by Frank J. Sleght, Clk., Bd. of Education, until noon, Feb. 4, for constructing an academy building, to cost about $80,000. It will be located on Main St. Separate contracts will be let as follows: General construction, heating, plumbing and electrical work. Plans and specifications at office of architect, Wilson Potter, 3 Union Sq., New York City. John Raines is Pres. Bd.

NEW YORK, N. Y.—Alfred R. Wolff, 130 Fulton St., has been appointed Consult. Engr. for heating and ventilation of both the United Engineering Building and the Engineers' Club, to be erected on 39th and 40th Sts., under the $1,500,000 Carnegie gift. C. O. Mailloux, 76 William St., is Consulting Electrical Engr. for the former building and Bates & Neilson, 42 Broadway, Electrical Engrs. for the Club.

NEW YORK, N. Y.—The American Seamen's Friend Society, 76 Wall St., is reported having plans prepared for a Sailor's Home, to be erected at Jane and West Sts. $750,000 is said to be available. The site was purchased recently.

Plans have been filed by Lorenz F. J. Weiher, Arch., 103 East 125th St., for six 6-story brick flats, 37 × 86 ft., to be erected on 154th St., east of 8th Ave., for Hoffmann & Robinson, 59 East 118th St. Cost, $240,000.

Rouse & Sloan, 11 East 43d St., Archs., will receive bids for construction of a 12-story apartment house for the Wyoming Apartment Co., 137 Broadway. It will be erected at 7th Ave. and 55th St. Reported cost is about $900,000.

Clinton & Russell, Archs., 32 Nassau St., have plans for a $400,000 6-story elevator apartment, 145 × 90 ft., to be erected at Madison Ave. and 96th St. Cades Realty Co., 542 Fifth Ave., owner.

NEW YORK, N. Y.—LUKE A. BURKE & CO., 401 West 59th St., were awarded the contract for a 1-story bath building, 163 × 140 ft., on Ave. A, from 23d to 24th St. Bid was $213,750. Noted on Dec. 15.

Bids are asked until 11 a. m., Jan. 16 by C. B. J. Snyder, Supt. School Bldgs., for installing heating and ventilating apparatus, electrical equipment, etc., in several buildings in boroughs of Manhattan, Bronx, Queens and Richmond.

W. P. Robins, Arch., 19 Liberty St., has prepared plans for a 4-story brick asylum for the Orphans' Home and Asylum of Protestant Episcopal Church, 105 East 22d St. It will be located on Convent Ave., between 135th and 136th Sts. Estimated cost, $125,000.

NEW YORK, N. Y.—Gordon, Tracy & Swartwout, Archs., 156 Fifth Ave., will soon receive bids for a 12-story hotel for the Longacre Realty Co. E. Clifford Potter, Pres., 135 Broadway. Probable cost, $250,000.

TOMPKINSVILLE, N. Y.—Bids are asked until Feb. 9 for furnishing the material and labor necessary for the erection and completion of the coal shed, lighthouse depot. Lieut.-Col. Wm. T. Rossell, Corps of Engrs., U. S. A. (Advertised, Engineering News.)

PORT MOTT, N. J.—Bids are asked until Feb. 6 for installing steam heating plant in the administration building. Capt. Louis F. Garrard, Jr., Q. M., Delaware City, Del. (Advertised, Engineering News.)

ATLANTIC CITY, N. J.—Bids are asked until Feb. 2 for installing hot-water heating in post-office building. James Knox Taylor, Supervising Arch., Treasury Dept., Washington, D. C.

JERSEY CITY, N. J.—It is rumored that the Commercial Trust Co. will erect a 16-story office building adjoining its Exchange Pl. building. J. Warren Hardenburgh is Pres.

McKEES ROCKS, PA.—The Pittsburg & Lake Erie Ry. Co., Pittsburg, has invited bids for a Y. M. C. A. building. Est. cost, $70,000.

PHILADELPHIA, PA.—Joseph M. Huston, Arch., Witherspoon Bldg., has started plans for proposed 20-story bank and office building, to be erected at Broad and Walnut Sts. for the Bellevue Realty Co. Electric elevators, power plant, steam heating, etc. Mentioned Dec. 29.

PHOENIXVILLE, PA.—Bids will be received about April for erecting the $60,000 Roman Catholic church. I. B. Lowrey is Arch.

BALTIMORE, MD.—H. J. Tinley, Arch., Builders' Exchange, has been commissioned to design a hotel for Bruno Momenthy. It will be built, according to report, at Water St. and Post-office Ave. Three stories, 50 × 126 ft., stone, brick and steel, fireproof, elevators, electric and gas light, etc. Cost, about $75,000.

WASHINGTON, D. C.—JAMES M. DUNN, 1324 Fifth St., N. W., has been awarded the contract for a school at 11th and Harvard Sts.

WASHINGTON, D. C.—Bids were received on Jan. 5 for furnishing and delivering all steel girders, beams and columns required for first floor of new building for National Museum by Bernard R. Green, Supt. Construction. American Bridge Co., 100 Broadway, New York, was lowest bidder, at $73,900.

SALISBURY, MD.—F. E. & N. R. Davis, 220 St. Paul St., Baltimore, are architects for a department store to be erected here for R. E. Powell & Co.

ALEXANDRIA, VA.—RICHARDSON & BURGESS, Colorado Bldg., Washington, D. C., have been awarded contract for a bank building for the Citizens' National Bank.

ROANOKE, VA.—L. E. Johnson, Pres. of the Norfolk & Western Co., has announced that work will begin at once on an additional office building, an exact duplicate of the present one, which will cost $112,000. It was also announced that 30 new engines, 1,500 freight cars, 11 passenger coaches, and 19 baggage and express cars would be ordered at once.

NORFOLK, VA.—City Council committees are said to consider plan to raise $50,000 for erecting a new market building.

NORFOLK, VA.—Ferguson & Calrow, Archs., will prepare plans and specifications for 6-story hotel for C. N. Whitehurst, E. Finley Cromwell and L. Berry Dodson, which will be erected at Granby and Tazewell Sts.

WHEELING, W. VA.—Bids were received on Jan. 3 at the office of the supervising architect, Washington, D. C., for constructing the post office here. Following are reported bidders: Charles McCall Co., Philadelphia, Pa., $226,995; J. E. & A. L. Pennock, Philadelphia, Pa., $247,-683; J. C. Robinson, Chicago, Ill., $226,917, $224,517 and $219,717; John Peirce, 277 Broadway, New York, $275,000; time, 18 months; Fissell & Wagner, New York, $227,000; Cramp & Co., Philadelphia, Pa., $230,437; time, 20 months; Broderick & Wind, St. Louis, Mo., $231,864; time, 22 months; A. B. Standard, St. James Bldg., New York, $241,600; F. L. Stevenson Contract Co., Dallas, Tex., and Tom Lovell, Denton, Tex., $243,400; W. E. Spear, Washington, D. C., $224,000; time, 24 months; Henry Shenk, Erie, Pa., $272,222; time, 24 months; Thomas Reilly, Philadelphia, Pa., $239,955; Standard Construction Co., Chicago, Ill., $222,750; Charles W. Gindele Co., Chicago, Ill., $224,387; V. Jobst & Sons, Peoria, Ill., $256,434; Andrew Dall, Cleveland, O., sandstone, $259,500; limestone, $254,500; time, 24 months; Brady Construction Co., Fairmont, Va., $269,777; time, 24 months; Mankin Construction Co., Richmond, Va., $234,750.66; time, 15 months; Miles & Bradt Co., Atlanta, Ga. $268,000; Richardson & Burgess, Inc., Washington, D. C., $218,500; Security Construction Co., Wheeling, W. Va., $325,523; time, 24 months; Constable Bros. Co., Erie, Pa., $279,373; time, Dec. 31, 1906; Hamilton-Irvin Co., Fairmont, Va., $396,-650; time, 2 years; C. E. Carson, Chicago, Ill., $237,739; time not stated. Unless otherwise noted, time for completion is as specified.

CHARLOTTE, N. C.—Highlands Hotel Co., previously reported incorporated with $200,000 capital for the erection of 6-story hotel, 98 × 183 ft., has completed organization with T. W. Hawkins, Pres.; Robert A. Dunn, Vice-Pres., and Walter S. Alexander, Secretary-Treas. Estimated cost of hotel, $150,000.

BIRMINGHAM, ALA.—Board of Education has rescinded award of contract for high-school building to the Stockmar Construction & Improvement Co., at $99,987. Total cost, including equipment, will be $125,000. The "News" states the following bids were received; (a) pressed brick; (b) stone; (c) common brick: T. C. Thompson & Bro., (a) $99,900, (b) $102,428, (c) $3,828.75 less than the bid for pressed brick; Frederick Moesser & Co., (a) $99,752, (b) $104,557, (c) $95,627; A. J. Krebs & Co., (a) $98,395, (b) $105,308, (c) $94,293; Theo. Pecoil & Co., (a) $93,630, (b) $104,880, (c) $3,200 less than bid for pressed brick; Jefferson Construction Co., (a) $114,000, (c) $3,500 less; Birmingham Building & Improvement Co., (a) $122,000; Coldwell & Drake, (a) $95,653, (b) $100,773, (c) $7,482 less than bid for pressed brick; Southern Construction Co., (a) $121,238, (b) $132,238, (c) $113,386; C. W. Brown & Co., (a) $92,900, (b) $100,400; Poole & Tanner, (a) $119,674, (b) $122,987, (c) $116,100. All bids were rejected. New bids were to be received Jan. 10 by G. C. Ensgtfeld, Cy. Treasurer. Breeding & Whilldin, Watts Bldg., are Archs.

BILOXI, MISS.—STANDARD CONSTRUCTION CO., Chicago, Ill., are reported to have contract, at $71,970, for the erection of post office, court house and custom house.

NATCHEZ, MISS.—Bids are asked by James Knox Taylor, Supervising Arch., Treasury Dept., Washington, D. C., until 3 p. m., Feb. 9, for the construction complete of post-office at Natches.

NEW ORLEANS, LA.—JAMES STEWART & CO., contractors, with offices in St. Louis, Pittsburg, Baltimore, New York and London, has secured the $2,000,000 contract for building ship docks and terminals at Chalmette for the Frisco Ry. System. Work will begin at once.

KNOXVILLE, TENN.—G. H. Miller, Pres. Miller Bros. Co., of Chattanooga, will arrange for construction of a $200,000 office building in this city, it is said.

MARYVILLE, TENN.—Ralph Voorhees, of New Jersey, has donated $100,000 to Maryville College. $15,000 is for a chapel and assembly hall, and $85,000 for the Endowment Fund. Dr. Samuel T. Wilson is Pres.

NASHVILLE, TENN.—Barnett, Haynes & Barnett, of Kansas City, Mo., are architects for proposed 12-story First National Bank building. It is reported that cost will be $300,000.

LOUISVILLE, KY.—J. J. Schlosser will erect a 6-story or 8-story office building at Second and Chestnut Sts. next spring. It will cost about $80,000.

COVINGTON, KY.—Schofield & Walker, Archs., Bank Bldg., will prepare plans for the 16th district school. Cost, $80,000. It will be of concrete construction and contain 16 rooms.

CINCINNATI, O.—Joseph G. Steinkamp & Bro., Archs., Mercantile Bldg., are reported preparing plans for an apartment house for the Robertson Realty Co. It will be 3½ stories high, 138 × 140 ft., of pressed brick, with stone trimmings. Estimated cost, $100,000.

CINCINNATI, O.—Chas. Wm. Dabney, LL. D., Pres. University of Cincinnati, states that endowments, to the amount of $200,000, will be secured this year for new engineering building, an auditorium and a dormitory. Other buildings are considered.

An architect will be engaged to prepare plans and specifications for projected city hospital. Board of Public Service has decided to construct the hospital on the pavilion plan. The Hospital Commission is composed of Dr. C. R. Holmes, Gustave W. Drach and Harry Hake. W. C. Johnson is Pres. of Bd. Estimated cost, $1,000,000.

CINCINNATI, O.—Bids are asked until Jan. 23 for erection of a 12-room school building at Langdon and Trimble Aves., Evanston. Jacob E. Cormany is Chn. Com. Bd. Education.

Bids are asked at same date for the carpenter work, electric wiring, concreting, brick masonry, blackboards and heating and ventilating for a 12-room school building at Clifton and McAlpin Aves.

CHILLICOTHE, O.—Bids are asked by James Knox Taylor, Supervising Arch., Treas. Dept., Washington, D. C., until Feb. 15 for the low pressure steam heating apparatus, complete in place, for the U. S. post office. (Advertised, Engineering News.)

ZANESVILLE, O.—Bids are asked until noon, Feb. 1, by H. E. Buker, Chn. Bldg. Com., Market Street Baptist congregation, for erecting a 3-story church. Geo. D. Griffen & Co., Fairmont, W. Va., are Archs.

NEWARK, O.—Plans have been prepared by Wilbur T. Mills, of Columbus, O., for a new school building to be erected in Woodside addition. The building will be heated by blast system. Bids will be received probably this month.

INDIANAPOLIS, IND.—John E. Cleland, Business Director, School Bd., will receive bids until Jan. 23 for installing of electric light and gas fixtures in Shortridge high school building. Vonegut & Bohn, Archs., Indiana Trust Bldg.

DECATUR, ILL.—Bids are asked until Feb. 23 for construction complete of a post-office here. James Knox Taylor, Supervising Arch., Treasury Dept., Washington, D. C.

CHICAGO, ILL.—The contract for building Sears, Roebuck & Co.'s "model town" has been let to the THOMPSON-STARRETT CO., 49 Wall St., New York. It is announced that the amount of the contract will be about $3,000,000. The property to be improved extends west from Kedzie Ave. and Harvard St. to Central Park Ave. The contract covers the erection of eight buildings. The merchandising house will be the largest building of its kind in the world—seven stories high and with a floor area of about 2,000,000 ft. The administration building will be 400 ft. long. The land covers a tract about 2,500 ft. long and 400 ft. wide. All railway tracks in the plat will be elevated 13 ft. Noted on Dec. 1.

Holabird & Roche, Archs., Monadnock Block, are said to be receiving bids on a store building, to be erected at 417-423 Wabash Ave., for Mandel Bros. It will be ten stories high, of stone, brick and steel construction, and steel work, beams, columns. Estimated cost, $400,000. Previously noted.

H. L. Newhouse, Arch., 4630 Prairie Ave., is reported preparing plans for a $250,000 apartment building, to be erected at 50th St. and Grand Ave. for Eiger Bros., 1249 Wabash Ave. To be three stories, of brick and stone, with composition roof.

R. B. Williamson, Arch. for Board of Education, has received bids for the Graham School building, to be built at 45th St. and Union Ave. It will be three stories, fireproof construction.

The Illinois Tunnel Co. has purchased the property of the Chicago Dock Co., at Taylor St. and the Chicago River. Part of this property will be improved at once with a $1,500,000 warehouse, which is said to be the first of a system of warehouses, the completion of which will ultimately cost $10,000,000.

AURORA, ILL.—It is reported that bids will be received by Patton & Miller, Archs., Hartford Bldg., Chicago, for a high-school building, to be erected for Board of Education of West Aurora. To be two stories high, 100 × 160 ft., built of brick and stone, with steam heat, etc.

KNOXVILLE, IA.—Bids are asked until Feb. 1 for erecting three brick buildings and remodeling one for the Hospital for Inebriates at Knoxville.

MINNEAPOLIS, MINN.—Plans prepared by Langdon & Turner, Archs., have been adopted by Armory Board for the new armory, to be erected on Kenwood Boulevard. Cost, about $150,000.

CHEYENNE, WYO.—Specifications for electric light fixtures are on file at office of Engineering News, New York, for which bids are asked until Jan. 28 at Fort D. A. Russell, Wyo. Capt. W. S. Scott, Q.-M. (Advertised, Engineering News.)

MAGNOLIA, ARK.—Hull & Bro., Jackson, Miss., are architects for court house to be built here. It will cost $60,000. Address R. S. Warnock, Comr.

BATESVILLE, ARK.—Bids are asked until Feb. 14 for installing low-pressure steam-heating apparatus in post-office building. James Knox Taylor, Supervising Arch., Treasury Dept., Washington, D. C.

MOHAVE CITY, ARIZ.—Bids are asked until Jan. 26, 2 p. m., by A. C. Tonner, acting Comr., Indian Affairs, Department of the Interior, Washington, D. C., to construct and complete a brick hospital building, with plumbing and acetylene gas piping, at the Fort Mohave school, Ariz. Plans and specifications on file at the U. S. Indian warehouses, at 265 South Canal St., Chicago; 119 Wooster St., New York; 815 Howard St., Omaha, Neb.; 602 South Seventh St., St. Louis, Mo.; 23 Washington St., San Francisco. For further information apply to Duncan D. McArthur, Supt., Mohave City.

OGDEN, UTAH.—Time for opening bids for the construction of the post-office and court-house building here has been extended from Jan. 5 to 3 p. m., Feb. 1. James Knox Taylor, Supervising Arch., Treasury Dept., Washington, D. C.

INDIANA.—Leslie M. Shaw, Secy. Treasury Dept., has recommended that $175,000 be appropriated for post-office at Muncie; $56,000 for 1-story building at Greencastle, with $9,000 additional for site; $56,000 for building and $19,000 for site for post-office at Jeffersonville; $75,000 for 1-story fireproof building in Michigan City, with $12,000 for site; $80,000, with $20,000 for site, for 1-story building in Columbus.

WATER SUPPLY AND IRRIGATION.

The names of parties awarded contracts are printed in capital letters.

BRIGHTON, VT.—Town voted Jan. 3 on issuing bonds for purchase and construction of water system. M. B. Ladd is Selectman. (Post-office, Island Pond.)

HOLYOKE, MASS.—We are informed that nothing has been done as yet regarding projected Manhan Reservoir. Some surveys for reservoir site may be made coming summer, but no contracts for construction of dam will be made for at least a year. James I. Tighe is Cy. Engr.

HOPKINTON, MASS.—Increase of town water supply considered.

BRANFORD, CONN.—Branford Lighting & Water Co., A. O. Shepardson, Secy., will, it is stated, extend its water service at a cost of $30,000, contracts for pipe having already been placed. A. William Sperry, New Haven, Conn., prepared the plans.

BRIDGEPORT, CONN.—Bridgeport Hydraulic Co., according to reports, is to commence work this spring on the laying of about 6½ miles 16 to 24-in. mains throughout the city, construction of large reservoir and connection of present reservoir system. Dwight Hall is Engr., reservoir system.

ARCADE, N. Y.—Village corporation votes to purchase plant of Wyoming & Cattaraugus Water Supply Co. for $20,000.

GENEVA, N. Y.—Contract for installing water and sewer laterals in East Ninth St. has been let to WILLIAM WILSON for $1,662.

LOCKPORT, N. Y.—City has voted to accept proposition of Niagara, Lockport & Ontario Power Co. to furnish it with water from a power canal to be built from Niagara River.

NEW YORK, N. Y.—Bids were received Jan. 6 by Department Water Supply, Gas and Electricity for constructing high pressure fire service mains in Brooklyn. The two lowest bidders were Jno. J. Cashman, 44 Court St., Brooklyn, and the Borough Construction Co., 189 Montague St., Brooklyn, at $792,601 and $795,314, respectively. Itemized bids are given under Contract Prices.

NEW YORK, N. Y.—Bids are asked by John T. Oakley, Comr. Water Supply, Gas and Electricity, 13 Park Row, until Jan. 25, for furnishing and delivering tapping cocks, tapping cock boxes, twist and plug drills and hydrant nozzles, waste cocks, caps and chains, handles, screws and bridges. Bids are also asked until Feb. 1 for furnishing and delivering 700 four-nozzle post hydrants and 40 two-nozzle fire-boat connection hydrants, for high-pressure fire service mains for the Borough of Brooklyn.

ASBURY PARK, N. J.—We are informed that no steps whatever have been taken as yet toward increasing city's water supply. Jno. L. Coffin is Supt. Water and Sewer Dept.

GARFIELD, N. J.—Committee, Councilman Troast, Member, is reported to have recommended that borough build water-works.

CONNELLSVILLE, PA.—Mountain Water Supply Co., recently incorporated with $1,000,000, is stated to be having a site cleared for the construction of a reservoir in Uniontown. Work proposes damming of Indian Creek near here, and construction of large water storage reservoir system. S. M. James, Connellsville, is reported to be Engr.

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PERRYOPOLIS, PA.—Perryopolis Water Co., capitalized at $50,000, has applied for charter to supply this place, Star Junction and Layton with water. It is proposed to construct dam in Washington Run in Perry. A. J. Guiler and Eugene T. Norton are interested.

McKEESPORT, PA.—Contract for sinking ten new wells for city water-works has been let to GEORGE F. JOHNSON, McKeesport, for $3,575.

WEATHERLY, PA.—Contract for engine, pipe line and tanks for Austin Water Co. is stated to have been let to NIAGARA HYDRAULIC ENGINE CO., Chester, Pa.

PITTSBURG, PA.—E. M. Bigelow, Director Pub. Wks., has awarded contract for 5,000 water meters, ranging in size from ¾-in. to 6-in., inclusive, to the Pittsburg Meter Co., of East Pittsburg, Pa. The order will be filled with the Keystone water meter. It is the intention of the city of Pittsburg to meter every water consumer in the near future, and this will require about 75,000 meters, so that the contract which has just been placed really represents but a small portion of the city's prospective purchase of meters. This initial contract represents an outlay of between $50,000 and $60,000.

WILMINGTON, DEL.—Water Commissioners, Peter J. Ford, Pres., has succeeded in purchasing water rights along the Brandywine, and it is now said that projected $1,000,000 filtration plant will be erected at Rockland, five miles above this city.

BALTIMORE, MD.—It is stated that all 10-in. mains in the burned district will be replaced by 20-in. mains. Alfred M. Quick is W.-W. Engr.

LOUISBURG, N. C.—Bids are asked by the Committee on Water-Works and Sewerage until Jan. 23 instead of Jan. 15 for the construction of water-works and sewerage. T. H. Lacy, Secy. Specifications for above work are on file at office of Engineering News, 220 Broadway, New York.

OXFORD, N. C.—Bids are asked by Henry A. Pressey, Engr., 1416 F St., Washington, D. C., until Jan. 25 for the construction of water-works, electrical lighting and ice plants. Plans and specifications may be seen at the office of Engineering News, 220 Broadway, New York. (Advertised, Engineering News.)

GADSDEN, ALA.—Council has re-granted water-works franchise to Messrs. Mitchell & Weller.

MARKSVILLE, LA.—City has voted to make special tax of installing water-works and electric lighting plant.

HOPKINSVILLE, KY.—Hopkinsville Water Co. has purchased site, and is stated to be clearing it preparatory to utilizing it as a reservoir. To do this, it is proposed to build a 760 ft. long and 17 ft. high dam.

OWENSBORO, KY.—Bids were opened Jan. 2 by city officials for construction of proposed water-works. John Trapp, Newport, Ky., submitted lowest combination bid for the system, his bid being $103,188, and includes everything except pipe and joints. About 50 bids were received, and, with exception of one other, all were on the various parts of the system.

COLUMBUS, O.—Plans for proposed filtration plant for this city have been completed, and will be submitted to State Board of Health Jan. 26. Contracts will be let probably in March.

YOUNGSTOWN, O.—Board Public Works has made approximate estimate setting cost of proposed standpipe for East End at $33,000, divided up as follows: Land, $3,000; stonework, $9,000; steelwork, $16,000; pumping, piping, etc., $5,000.

CANTON, O.—Contract for new pump for city water-works has been let to WILLIAM TOD CO., Youngstown, O., for $44,000.

WEST LAFAYETTE, IND.—Town may purchase local water-works for about $50,000.

GRAND RAPIDS, MICH.—We are informed that city engineer's department is now preparing estimates for extending the water-works intake about three miles up the river, and for the purchase of a new pump at the present pumping station. The question will probably be submitted to the voters the coming spring election. L. W. Anderson is Cy. Engr.

JACKSONVILLE, ILL.—Jacksonville Water-works Co. has been incorporated with $350,000 capital. John A. Ayers, Chas. W. Mackay and O. N. Gardiner are interested.

CHICAGO, ILL.—Bids were opened by Commissioner Public Works, Jan. 3, for building foundation for the 25,000,000-gallon pump at Chicago Ave. station, Wm. E. McCarthy, at $19,800, being low bidder.

MUSCATINE, IA.—Contract for iron mains, specials, etc., for water-works here has been let to DIMMICK PIPE CO., Birmingham, Ala., for about $30,000.

DULUTH, MINN.—Contract for new gas engine and pump for Woodland pumping station has been let to FAIRBANKS, MORSE & CO., for $2,892.

PARKERS PRAIRIE, MINN.—Contract for constructing water-works for this village has been let to DES MOINES BRIDGE & IRON WORKS, Des Moines, Ia., for $6,400.

LINDSBORG, KAN.—Bids are asked until Jan. 21 for furnishing 200 tons 4, 6 and 8-in. cast-iron water pipe and about three tons of special castings. N. J. Thorstenberg, Mayor.

WINDSOR, MO.—Bonds for water-works have been voted and Burns & McDonnell, Consult. Engrs., Kansas City, Mo., are to prepare plans and specifications. Supply is to be secured from deep well.

PECOS, TEX.—Toyah Lake Land & Water Company has been incorporated with $199,000 capital to conduct system of irrigation. O. D. Weeks, W. R. Weeks and J. A. Lowe, all of El Paso, Tex., are incorporators.

COLORADO SPRINGS, COLO.—W. A. Otis has made proposition to city offering to construct 950,000,000-gallon reservoir above Green Mountain Falls, in consideration for lease of 8-in. water main that supplies Colorado City. Ira Harris is Mayor.

DENVER, COLO.—Bids are asked until Jan. 28 for furnishing and installing 80-HP. tubular return boiler and one 27,000-gallon steel receiving water tank at Fort Logan. Col. C. A. H. McCauley, C. Q.-M.

FLORENCE, COLO.—Engineers for Colorado Fuel & Iron Co. have again resumed surveys for its projected $1,000,000 water supply canal. It is reported that excavation work will be commenced in the spring.

DENVER, COLO.—Agricultural Ditch Co., Harry Lee, Secy., contemplates, it is stated, expenditure of about $25,000 within next three years for additional reservoirs.

GREELEY, COLO.—Eastman Canal & Reservoir Co. has filed articles of incorporation, and proposes to construct 19 reservoirs near Dover, Colo. Benjamin A. Johnson, John C. Murray and Samuel F. Martin are interested.

BLACKWELL, OKLA.—City is to vote on $12,000 bond issue for extending water-works and building sewer.

FULLERTON, CAL.—Local reports state that Anaheim Union Water Co. will issue bonds; a portion of the proceeds will be used to cement the main canal at est. cost of $60,000, and the north branch canal at cost of $20,000; a pumping plant to cost $20,000 is to be installed also.

LOS ANGELES, CAL.—Bids are asked by Board Water Commissioners, Wm. Mulholland, Supt., 440 S. Hill St., until 3.30 p. m., Jan. 16, for approximately 2,920 tons standard bell and spigot cast-iron water-pipe.

OAKLAND, CAL.—Engineer Board, F. C. Turner, Cy. Engr., member, has reported favorably upon proposition of Bay Cities Water Co. to furnish this place with municipal supply.

PASADENA, CAL.—Special election may be held in February to vote on $1,000,000 bond issue for purchase by city of the four local water-works plants.

SAUSALITO, CAL.—City Trustees, F. D. Linsley, Clk., have passed ordinance calling for election to vote bonds for construction of water-works.

WHITTIER, CAL.—Election may be held to vote on $110,000 bond issue for acquiring water system and construction of reservoir.

PHOENIX, ARIZ.—Bids are asked by A. C. Tonner, Acting Comr., Indian Affairs, Washington, D. C., until Jan. 28 for material and labor required for constructing water system at Phoenix School.

R. H. Woolf, H. L. Chandler and A. J. Peters, Phoenix, are reported interested in project for construction of five-mile ditch and installation of pumping plant west of Tempe.

TEMPE, ARIZ.—Tempe Pumping Co., according to reports, is to negotiate $100,000 loan for enlarging its system.

TUCSON, ARIZ.—Election may be called to vote on issuing $100,000 of bonds for improvements to water and sewer systems.

SALT LAKE CITY, UTAH.—Weber Reservoir, Power & Irrigation Co., Thos. L. Allen, Mgr., is stated to have completed preliminary surveys for construction of dams near Acho and Peoa, to cost about $500,000.

Frank C. Kelsey, C. E., Salt Lake City, has filed an application with A. F. Doremus, State Engr., for the appropriation of 1,000 second feet of water from the San Rafael River in Emery County. The dam to be constructed is 80 ft. high, 100 ft. wide on top. The flume is to be 35 ft. wide and 7 ft. deep. The channel to divert the water is to be 105,690 ft. long, and the amount of land to be irrigated is 50,000 acres.

POCATELLO, IDAHO.—Bids are asked by Pocatello Water Co., until March 31, for furnishing 600 meters.

TORONTO, ONT.—We are informed that the city engineer's department of Toronto is now expending $1,000,000 in improvements to the water-works system, and $700,000 in the construction of an auxiliary system of pumping engines and fire mains for fire purposes.

NORTH VANCOUVER, B. C.—Council has let contract for completion of water-works system to J. C. WILLIAMS, Vancouver, B. C.

SEWERAGE.

The names of parties awarded contracts are printed in capital letters.

WORCESTER, MASS.—Harrison P. Eddy, Supt. Sewers, has filed estimate of the amount of money necessary for his department. $113,000 will be required, of which $28,000 is for maintenance, $30,000 for sewer construction and $55,000 for sewage purification. In addition he requests that $20,000 be held for the beginning of the improvements of Beaver Brook this year. E. H. Towne is Cy. Clk.

NEW BRITAIN, CONN.—City has sold $200,000 of bonds for continuing work on sewers this year. W. H. Cadwell is Engr. Sewer Board.

ROCKVILLE, CONN.—A. William Sperry, Engr., 82 Church St., New Haven, informs us that general plans have been completed for Rockville sewage disposal plant which is to consist of a septic tank and contact beds, each divided into six sections and which will cover about two acres of ground. Proposed construction will be of concrete with parts of it reinforced with steel. Bids will be received for the work in the spring. Mentioned on Jan. 5.

HARTFORD, CONN.—Charles H. Slocomb, Hartford, was low bidder, at $3,176, Dec. 31, for constructing pipe drainage system in railroad yard north of Morgan St. for Connecticut River Bridge and Highway District, Edwin Dwight Graves, Ch. Engr.

ROCHESTER, N. Y.—F. F. Brotsch was lowest bidder, at $2,517, for sewer in Copeland St.

BRIGHTON, N. Y.—Frederick K. Wing, C. E., of Buffalo, has surveyed this village in view of making plans and preparing estimates for a sewer system. Estimated cost is about $50,000. Vote will be taken on the question at special election to be held Jan. 18.

BROOKLYN, N. Y.—Following sewers will be constructed this year. Work has been authorized by Board of Estimate and Apportionment. Estimated cost to construct a sewer in Jefferson St., between Irving and Wyckoff Aves., $2,800; sewer in East 31st St., between Flatbush Ave. and Glenwood Road, $2,700; Beverley Road, between Ocean Parkway and Second St., $7,700; 67th St., between Second and Third Aves., $28,800; Ovington Ave., between Fifth and Sixth Aves., $4,100; New York Ave., between Flatbush Ave. water-works and Farragut Road, $2,000; 20th St., between Terrace Pl. and Vanderbilt St. and between 20th and East Fifth Sts., $5,400; in portions of 65th, 86th Sts. and 16th and 17th Aves., $39,300; also several sewer basins.

JERSEY CITY, N. J.—The Street and Water Board has adopted specifications for the reconstruction of sewer in Baldwin Ave., from Magnolia Ave. to Pavonia Ave. Bids will be received. Charles A. Van Keuren is Ch. Engr.

HOLLY BEACH, N. J.—Under date of Dec. 8 it was announced in this column that MURDOCH & CO., of Philadelphia, had been awarded a $29,000 contract for constructing eight miles of sewers. We are informed that the correct name is MURDOCH & MULLIN, Engrs. and Contractors, Holly Beach.

NORTH BRADDOCK, PA.—Contract for constructing pipe sewers in various streets has been let to JOHN S. SHEEKEY, Rankin, Pa., for $6,294. Bids were opened Dec. 30. C. A. Stewart is Boro. Engr.

Information concerning contracts to be let or supplies to be furnished, and corrections of errors and omissions in published items, are insited. Full details regarding the equipment, tools, etc., required for the proposed improvements are specially desired.

HAVRE DE GRACE, MD.—Contract for constructing about 3½ miles of sewers for this city, bids for doing which were opened Dec. 1, was let Dec. 10 to F. E. SCHNEIDER & CO., Baltimore, Md., at $17,969. Williams & Whitman, New York, were Engrs. Itemized bid of contractor is given under Contract Prices.

WASHINGTON, D. C.—Bids are asked by the Commissioners until Jan. 30 for constructing a portion of the sewage disposal system trunk sewer and connections, including sewage conduits and twin sewers. Henry B. Macfarland, Henry L. West, John Biddle, Comrs. (Advertised, Engineering News.)

WASHINGTON, D. C.—Bids are asked until Jan. 19 for furnishing repressed vitrified sewer invert bricks. Henry B. F. Macfarland, Comr. (Advertised, Engineering News.)

RICHMOND, VA.—W. E. Cutshaw, Cy. Engr., has submitted a statement of suggested improvements to Council Committee on Streets. For constructing sewers, $708,100 is asked; for improving Shockoe Creek, $701,522. Work probably will not be begun this year.

LOUISBURG, N. C.—See under Water-Works.

DUBLIN, GA.—City has sold $18,000 of sewer bonds. Work will be commenced at an early date. Arthur Pew, C. E., Temple Court, Atlanta, Ga., has been engaged to prepare plans.

PALATKA, FLA.—Bids are asked by the Board of Bond Trustees until Feb. 1 for constructing a sanitary sewer system, consisting of about 11 miles of 6 to 15-in. pipe. E. S. Crill, Chn.; Wm. W. Lyon, Engr. (Advertised, Engineering News.)

NEW ORLEANS, LA.—F. S. Shields, Secy. Sewerage and Water Board, informs us that, owing to technical defect, it is necessary to temporarily withdraw advertisement calling for bids for sewers, water pipe, etc., until Jan. 31. New bids will be called for soon.

JOHNSON CITY, TENN.—The Johnson City Sewerage Co. has been incorporated with capital of $16,000 by William Ponder, L. C. Williams, P. M. Ward, G. T. Wofford and J. A. Ponder.

LEXINGTON, KY.—P. P. O'Neill, Cy. Engr., has prepared plans and specifications, with maps and profiles, for the construction of the new sewers provided for by the bond ordinance voted at last election.

TORONTO, O.—V. O. Ault, Village Clk., announces that Council has passed ordinance granting the People's Sanitary Sewerage Co., of Toronto, the right to lay, construct and maintain sanitary sewers and a sanitary sewer system here.

COLUMBUS, O.—Consulting Engineer Fuller announces that plans for the filtration plant will be submitted to the State Board of Health Jan. 26. Contract for the sewage station will be let in August.

TOLEDO, O.—Bids are asked until noon, Jan. 19, for constructing portions of several street sewers. Harry S. Jones, Secy. Bd. Pub. Service.

CLEVELAND, O.—We are informed that about 60 sewers will be built this year. Bids will be called for the work.

NEW ALBANY, IND.—Bids were received, as follows, by city council on Jan. 2: M. A. Tolbert & Co., Logansport, Ind., $226,000; George O. Tenny, Spartansburg, S. C., $238,000; L. A. Marshall & Co., Indianapolis, $236,716; Irwin Bros., New Orleans and Greenville, O., $238,543; Foulkes, Forbes & Co., Terre Haute, Ind., $240,000; Roberts & Co., Terre Haute, Ind., $236,049; Burch, Govern & Co., Muncie, Ind., $249,000; P. J. McNerney, Brownstown, Ind., $207,310; Seibert & Smith, Indianapolis, $237,500; W. R. Hines & Co., Franklin, Ind., $246,372; James Healey, Chicago, $288,376. Bids were for constructing about 26 miles of 8 to 36-in. pipe sewers. Eugene Brisly is Cy. Clk.

ST. CLAIR HEIGHTS, MICH.—Edw. C. Hengstebeck, Village Clk., states that it is proposed to construct a trunk sewer from the village limits on Mack Ave., to connect with the Cadillac sewer in Detroit. Probable cost, $12,000. Wm. C. King, 12 Moffat Bldg., Detroit, is Engr.-in-Charge.

FORD CITY, MICH.—Special election may be called to vote on question of issuing bonds for a sewer system.

DES MOINES, IA.—Alderman John Myerly is interested in plan to build the "Ingersoll Avenue" sewer system at once. The system will run from 21st and High Sts. west to 38th and Woodland Sts.

DAVENPORT, IA.—The Davenport Construction Co. was lowest bidder, at $72,160, for construction of north end sewer. It will be 17,600 ft. long.

ST. PAUL, MINN.—The board of public works received bids Dec. 29 for constructing the Palace St. sewer system, as follows: James Forrestal Co., $8,854; P. J. Ryan, $8,293; E. J. Kirkland, $5,300.

MORRIS, MINN.—Bids were opened Jan. 3 at the office of the Commissioner of Indian Affairs, Washington, D. C., for constructing an extension to the sewer system at the Morris Indian school, Minn. The lowest bidders were: N. O. Nelson Manufacturing Co., St. Louis, Mo., $1,975; W. D. Lovell, Minneapolis, Minn., $1,746.

SIOUX FALLS, S. DAK.—New bids will be called for construction of a trunk sewer in Tenth St. Stone, brick or cement may be material offered.

JEFFERSON CITY, MO.—Contract for constructing pipe sewers in District No. 11, bids for doing which were opened Jan. 4, has been let to GRUBER & VETTER, Jefferson City, for $8,365. J. C. Herring is Cy. Engr. Itemized bid for above work will be given under Contract Prices.

MEXICO, MO.—Contract for about 2,300 ft. of 12-in sewerage will be let about April. Wallace Dearing, Clk. R. S. McKinney is Engr.; E. E. Jones is Mayor.

VICTORIA, TEX.—Sewer system will be installed. Only a portion will be built at present.

SAN DIEGO, CAL.—Bids are asked until 10 a. m., Jan. 19, for construction of sewer system extensions; also for extension and improvement of water-works. F. H. Dixon, Secy. Bd. Public Works. Estimated cost, $96,000 for sewer mains and $99,500 for cast-iron and wooden water mains. Work must be begun by Feb. 1 and completed Aug. 1.

PASADENA, CAL.—B. DERANO has contract for sanitary sewer in Mentor Ave., at $2,388.

LUNENBURG, N. S.—Bids are asked until Feb. 15 by Geo. H. Love, Town Clk., for construction of sewer system.

STREETS AND ROADS.

The names of parties awarded contracts are printed in capital letters.

HOLYOKE, MASS.—The Board Public Works in its annual report recommends an appropriation of $75,000 for permanent highway work the coming year.

WELLSLEY, MASS.—Brook St. is to be relocated and widened. Work to be started as soon as weather permits.

ALBANY, N. Y.—Hastings Paving Co. was low bidder last week for 14,500 sq. yds. block asphalt paving on South Pearl St.

NORWALK, CONN.—Contracts for about 6,600 ft. of state road have been awarded to L. L. BECKWITH, City. The road will be gravel, and work will be started in the spring.

BROOKLYN, N. Y.—Borough President Littleton has been authorized by Board of Estimate and Apportionment to pave, grade, etc., on several streets. Est. cost, $32,200.

CORTLAND, N. Y.—Bids are asked by Board Public Works until Jan. 26 for constructing about 40,000 sq. yds. either of asphalt, bitulithic, brick or block pavement, 25,000 ft. stone or cement curb and gutter, 25,000 ft. 3-in. drain tile, etc. E. S. Dalton, Cy. Clk. W. S. Farrington, Engr., 513 Dillaye Memorial Bldg., Syracuse. (Advertised, Engineering News.)

POUGHKEEPSIE, N. Y.—It is stated that Board of Supervisors has passed a resolution for the improvement of four miles of Hyde Park Road, at a cost of $52,450.

OCEAN CITY, N. J.—T. Adanes, Cy. Clk., will soon advertise for bids for $40,000 worth of street improvements.

FORT MOTT, N. J.—Bids are asked until Jan. 22 for constructing shell road. Address Quartermaster.

NEWARK, N. J.—Plans for new plank road, which is to take the place of present plank road across meadows between Newark and Jersey City, have been filed with local Board of Works. Cost, $1,000,000.

COLLINGSWOOD, N. J.—Bids are asked by Highway and Drainage Committee until Jan. 17, 8.30 p. m., for macadamizing and laying brick gutters on certain streets. Plans and specifications may be seen at office of Earl Thomson, C. E., 301 Market St., Camden.

TOM'S RIVER, N. J.—Contract for building gravel road in Lacy Township, about 23,755 ft., was awarded to LEWIS RAFETTO, Drexel Bldg., Philadelphia, Pa., for $17,133.

HARRISBURG, PA.—Bids are asked by State Highway Department until Jan. 31 for constructing 5,645 ft. road from Summerhill to South Fork, Cambia County.

WASHINGTON, D. C.—District Commissioners have ordered the paving of First St., N. E., with granite block. Est. cost, $5,000.

BIRMINGHAM, ALA.—Contract for paving on Highland Ave. will probably be given to the UNITED STATES WOOD PRESERVING CO., 29 Broadway, New York.

CLEVELAND, O.—We are informed that bids will be received by Board Public Service until Jan. 25 for paving 19 streets with brick, to be followed shortly by others. About 106 streets will be paved in 1905. Wm. J. Carter is Cy. Engr. Peter Witt is Cy. Clk.

CINCINNATI, O.—The announcement is made here that $1,000,000 will have to be expended on street improvements during the coming year. Geo. F. Holmes is Clk. Brd. Pub. Service.

BELLAIRE, O.—Council is preparing to pave Jefferson, 46th and 47th Sts.

NORWOOD, O.—We are informed that THOS. HOWARD, JR., Montgomery Pike, Norwood, has been awarded contract for paving on Lloyd Ave., for $1,334. J. A. Stewart is Cy. Engr.

TOLEDO, O.—Contract to pave 13th St. has been awarded to KERLIN BROS., Nasby Bldg., for $6,291.

XENIA, O.—Contract for paving Main St., about 25,650 sq. yds., was let to F. M. KEMP & SONS, Middletown, O. J. E. Jones is Clk. Bd. Pub. Service.

RICHMOND, IND.—City Council has decided to ask for bids for improvement of a number of streets by laying brick roadways and cement sidewalks. City Engineer is preparing plans and specifications.

GOSHEN, IND.—John L. Cooper, Cy. Engr., writes us that the paving of North Fifth St. has been indefinitely postponed.

CHICAGO, ILL.—It is reported that the city will advertise at once for $149,000 sq. yds. asphalt, 3,500 yds. of brick, 14,000 sq. yds. macadam and 20,000 sq. yds. of granite sheet paving. Jno. B. Hittell is Engr., 203 City Hall.

PEORIA, ILL.—Moss Ave. will be resurfaced its entire length. Cost, $30,000. Bids will be advertised for. W. L. Stebbings is Cy. Engr.

BOONE, IA.—We are informed that the contract for about 2,000 ft. brick sidewalks here has been awarded to BOONE BRICK, TILE & PAVING CO.

DULUTH, MINN.—Local press reports state that Broadway will probably be paved in the spring.

WEBB CITY, MO.—Bids are asked until Feb. 6 for furnishing labor and material and constructing about 18,272 sq. yds. of brick pavement. W. E. Smith, Cy. Engr. (Advertised, Engineering News.)

ST. JOSEPH, MO.—Board Public Works will recommend for passage in Council an ordinance providing for the paving of South Fourth St. with brick. W. H. Floyd, Jr., is Cy. Engr.

ROSENDALE, MO.—City has issued $85,000 in bonds for construction of sewers and street paving. Address Mayor for information.

MEXICO, MO.—Wallace Dearing, Cy. Clk., writes us that contracts for about 15,000 sq. yds. of brick or block paving will be let about April.

TACOMA, WASH.—Frank L. Davis, Cy. Engr., informs us that plans are being prepared for paving on South 17th St. and Jefferson Ave. with asphalt.

TACOMA, WASH.—Contract for laying cement and wooden sidewalks, crosswalks and storm water drains in Dist. No. 217 was awarded to W. J. MURPHY for $10,772.

LOS ANGELES, CAL.—San Pedro St. is to be opened and widened. Est. cost, $170,000. Harry F. Stafford is Cy. Engr.

SAN FRANCISCO, CAL.—Thos. P. Woodward, Cy. Engr., has completed plans and specifications for paving on Mission St. with asphalt. Cost, $80,000.

MANUFACTURING PLANTS.

The names of parties awarded contracts are printed in capital letters.

AUGUSTA, ME.—The Shawmut Mfg. Co. has incorporated with a capital of $200,000. E. J. Lawrence is Pres., Fairfield, Me.

GREENVILLE, ME.—The Greenville Core & Power Co. will rebuild their plants, recently destroyed by fire, as soon as plans are completed.

BOSTON, MASS.—The Union Brick & Machine Co. has incorporated with a capital of $50,000. Geo. L. Downing is Pres., 78 Medford St., Medford.

ATTLEBORO, MASS.—Karl H. Hyde, Arch., Horton Block, has prepared plans for two factory buildings, four stories, 40 × 400 ft., and one story, 90 × 100 ft., respectively. Bids will be received in early spring.

BROOKLYN, N. Y.—Ross F. Tucker, Pres. Tucker & Vinton, Inc., 156 Fifth Ave., New York, has been appointed as Consulting Engineer with Mr. Goodrich, Ch. Engr., and Mr. Higginson, Arch., for construction, in reinforced concrete, of factory building for Bush Terminal Co., in South Brooklyn.

NEW YORK, N. Y.—The Pelton Steel Lintel Co. has incorporated with $10,000 cap. stock, to manufacture patented lintels, etc. Incorporators: C. A. Wendall, L. B. Varney, City, and W. F. Pelton, Brooklyn.

FORT TOTTEN, N. Y.—All bids for brick repair shop were rejected as being in excess of the amount available for the work.

CAMDEN, N. J.—R. A. Rockhill, 307 Market St., is ready for bids for a brick plant at this place.

PHILADELPHIA, PA.—Contract for addition to factory at 56th St. and Woodland Ave., for Philadelphia Screen Co., has been awarded to HERMAN VOIGHT, 2929 Girard Ave.

Brockie & Hastings, Archs., 328 Chestnut St., are preparing plans for a cigar factory.

Chas. W. Ervien & Co., Memphis St. and Columbus Ave., have invited bids for factory at Venango and D Sts. Brick, 2 stories, 115 × 70 ft.

EDDYSTONE, PA.—The Belmont Iron Works, Real Estate Trust Bldg., Philadelphia, want bids for a two-story iron plant here.

HARRISBURG, PA.—T. H. Hamilton, Arch., is preparing plans for an addition to bakery at 13th and Walnut Sts. for Bernard Schmidt. Brick, 3 stories, 50 × 150 ft.

PHILADELPHIA, PA.—Ballinger & Perrot, Archs., 1200 Chesnut St., have plans for bids for four-story factory at 18th and Courtland Sts., for Alteneder & Sons.

YORK, PA.—York City Cigar Co. has invited bids for a factory at this place. Brick, 4 stories, 180 × 45 ft.

LINFIELD, PA.—The Mitchell Van Meter Co. has invited bids for an addition to their factory. Brick and stone, 1 story, 150 × 50 ft.

BALTIMORE, MD.—The Mullan-Harrison Co., stone and marble works, 1422 Belvidere St., will, it is reported, award contract to JAMES F. FARLEY, 17 North Frederick St., for construction of building at 400 North Paca St., after plans and specifications by Henry J. Tinley, Arch., 421 St. Paul St. Brick, 2 stories, 18 × 95 ft.

The Maryland Biscuit Co., M. J. Fitzsimmons, Gen. Mgr. 516 South Charles St., will erect steam bakery on Barre St. Warehouse to be three stories, 60 × 81 ft., and bakery one story, 60 × 80 ft. R. H. Ford Construction Co., 407 St. Paul St., is estimating on the construction.

The Phoenix Pad Co., Monroe St., has awarded contract to EDWARD D. PRESTON, 140 West Fayette St., for construction of factory building on Eagle St. Brick, with stone trimmings, 3 stories, 105 × 112 ft. Cost, $15,000.

Morris Robinson, 1031 West Baltimore St., and Meyer Abrahamson, have purchased property at 214 Myrtle Ave., and will erect a three-story cigar factory on site, which is 25 × 100 ft.

CHASE CITY, VA.—The Chase City Buggy Co., it is reported, will rebuild its plant.

SISTERVILLE, W. VA.—The Sisterville Brewing Co. has been chartered with a capital of $150,000. Incorporators: A. Bruner, City; Eute Wile, E. T. Heineman, H. P. Ecker, Pittsburg, Pa.; H. A. Ruhe, Jeannette, Pa.

WHEELING, W. VA.—Central Ice & Cold Storage Co. has been organized to build a plant here. Don Mendmen is Pres.

WHEELING, W. VA.—A plant to be known as the Warwood Tool Works, will be established here. B. W. Peters is Pres.

SELMA, N. C.—A cotton mill will be erected here containing 5,000 spindles. Company will begin construction work by April 1. Capital, $300,000. M. C. Winston, Pres. Bank of Selma, is promoting the enterprise.

GAFFNEY, S. C.—A new cotton mill will be established here, to be in operation by March 1. J. A. Carroll can inform.

DONALSONVILLE, GA.—It is stated that the Benton Shinglery Co. will rebuild its cotton gin recently burned.

CORDELE, GA.—The Cordele Sash, Door & Lumber Co. will erect a brick factory here.

COLUMBUS, GA.—The Eagle & Phoenix Mills will add new machinery at a cost of $40,000.

MONTGOMERY, ALA.—Plant of the Montgomery Lumber Mfg. Co. was damaged by fire. Loss, $75,000.

MARLOW, ALA.—It is reported that J. W. Grove will rebuild saw mill, burned recently. New mill will have a capacity of 75,000 ft. per day.

NEW ORLEANS, LA.—The Liquid Carbonic Co., 67 Wells St., Chicago, Ill., will erect a plant here. Cost, $50,000.

KNOXVILLE, TENN.—Wm. J. Oliver is reported as purchasing a site upon which to erect a wheel foundry.

HALLS, TENN.—C. W. Moore and others contemplate erecting a box factory here, and $12,000 has been subscribed toward the enterprise. The Mayor can probably inform.

LOUISVILLE, KY.—Balke & Co. Iron Works will expend about $15,000 in new machinery and equipment. This company will soon incorporate with $60,000 cap. stock. W. C. Balke is Pres. Operations will begin March 1.

OWENSBORO, KY.—It is stated that the Owensboro Wagon Co. will erect a new factory in the spring. Cost, $75,000. W. A. Steele is Secy.

OWENSBORO, KY.—The Hickman-Ebbert Wagon Co., capital $300,000, will soon incorporate. A site has been purchased, and work on a wagon manufactory will be started in early spring. Dr. J. H. Hickman will be president.

CLEVELAND, O.—Mueller & Mildner, 313 Ferguson Bldg., Detroit, Mich., it is reported, are ready for figures for buildings for brewery plant for Standard Brewing Co., City, to include brew house, cellars, wash house, ice house, pitching, racking and bottling works. Steel, fireproof construction, 5 stories, 120 × 110 ft.

EVANSVILLE, IND.—The E. B. Olsage Co. has incorporated with ample capital to establish a manufacturing plant in this city. Company will manufacture roofing, cornices and other building material. E. B. Olsage is Pres.

KOKOMO, IND.—Kokomo Furniture Co. has ordered plans for new factory building to be erected on site of building recently burned.

Write our advertisers when you intend to buy your supplies and machinery for improvements, or for carrying out your contracts. If you do not find what you want in our advertising pages write us for list of firms, and we will put you in communication with them at once.

RICHMOND, IND.—The American Seeding Machine Co., City, is preparing to build a brick addition, 50 × 175 ft., three stories. Fred Carr is Gen. Mgr.

DETROIT, MICH.—Jos. E. Mills, 510 Washington Arcade Bldg., is taking figures for adding third story to factory building, 176 × 49 ft., for Buhl Stamping Co. Thos. W. Forster is Supt., 204-210 Larned St. W. Cost, $4,000.

DETROIT, MICH.—J. C. Widman & Co., 686-88 Warren Ave. W., have had plans prepared for a three-story addition, 66 × 336 ft., to furniture factory. Cost, $[illegible],000.

JOLIET, ILL.—The "Republican" announces that the Illinois Steel Co. is about to begin an extension of its works at a cost of $100,000, to accommodate the business of the Continuous Rail Joint Company of America. The latter company is a New Jersey corporation with headquarters at Newark, N. J.

CHICAGO, ILL.—D. E. Postle, Arch., 204 Dearborn St., let general contract to JACOB RODATZ for a factory building for Albert Dickenson. Cost, $25,000.

BELOIT, WIS.—It is announced that the J. Thompson & Sons Mfg. Co. will rebuild plant recently damaged by fire to the extent of $50,000.

MILWAUKEE, WIS.—It is stated that H. G. Koeller, Arch., 427 Milwaukee St., has plans and is taking figures for a two-story box factory, 120 × 350 ft., for Enterprise Box Co., care architect. Cost, $60,000.

KANSAS CITY, KAN.—Robt. W. Waddel, C. E., Kansas City, Mo., has charge of construction work of the new Schwarzschild & Sulzberger Co.'s smoking and storage plant here. Cost, $19,000.

HARRISON, ARK.—The erection of a woolen mill is contemplated. John A. Bunch, W. H. Cecil and W. J. Meyers are a committee appointed to ascertain cost of machinery, etc.

LITTLE ROCK, ARK.—Fire destroyed the plant of the Little Rock Furniture Co. Loss, $150,000.

DALLAS, TEX.—The Peerless Steam Laundry Co., of Dallas, capital $20,000, has been chartered here by Paul W. Lauther, R. W. Lauther, Jr., and Harry P. Lauther, of Dallas.

JACKSONVILLE, TEX.—The Jacksonville Ice & Mfg. Co., capital $10,000, has been chartered. Incorporators: Ben B. Cain, W. Frank Knox, Claude Wiley, of Tyler, John H. Bolton and W. A. Newton, of Jacksonville.

EVERETT, WASH.—It is stated that Bernard Hochstadter will soon have plans started for brewing plant to cost about $1,000,000.

LOS ANGELES, CAL.—O. E. Goodale, Arch., has prepared plans for a large packing house.

MISCELLANEOUS CONTRACTS.

The names of parties awarded contracts are printed in capital letters.

LUMBER.—New York, N. Y.—Bids are asked by James H. Tully, Comr. Public Charities, until Jan. 18 for furnishing and delivering lumber and timber.

BOILER PLANT.—West Point, N. Y.—Bids are asked by Quartermaster, U. S. M. A., until Jan. 28 for installation of a boiler and mechanical draft plant. (Advertised, Engineering News.)

DREDGING, DOCKS.—Chicago, Ill.—Bids are asked until Feb. 4 for dredging and constructing docks in Chicago River. Col. O. H. Ernst, U. S. Engrs. (Advertised, Engineering News.)

DRAINAGE DITCH.—Alexandria, Minn.—Douglass County Commissioners have voted to issue $8,000 of bonds for constructing drainage ditches. E. P. Wright is County Audr.

DREDGE.—Manitowoc, Wis.—Contract for building steel dredge to cost $90,000, for Edward Bros., of Sault Ste. Marie, has been let to MANITOWOC DRY DOCK CO., Manitowoc.

DRAINAGE.—Hutchison, Kan.—T. G. Elbury, Cy. Engr., is reported to be preparing plans for drainage of northwest portion of city. Work calls for construction of a canal and a dike.

WHARF REPAIRS.—Fort Totten, Willets Point, N. Y.—Bids are asked until Feb. 7 for the repairs of a portion of long wharf. Capt. Geo. H. McManus, Const. Q. M. (Advertised, Engineering News.)

IRON AND LUMBER.—New York, N. Y.—Bids are asked by John McG. Woodbury, Comr. Street Cleaning, 13 Park Row, until Jan. 24 for furnishing and delivering iron; also for furnishing and delivering lumber.

STRIPPING.—St. Clair, Pa.—Bids are asked until Feb. 1 for 200,000 yds. stripping contract. Specifications and particulars on ground at St. Clair, Pa., or at 96 Fifth Ave., New York, room No. 10. (Advertised, Engineering News.)

MACHINERY.—Washington, D. C.—Bids are asked until Feb. 6 for furnishing and erecting coal and ash handling machinery for the sewerage pump station. Henry B. F. Macfarland, Comr. (Advertised, Engineering News.)

TRAVELING CRANE.—Washington, D. C.—Contract for 40-ton electric traveling crane for Puget Sound Navy Yard, bids for which were opened Dec. 31, has been let to CLEVELAND CRANE & CAR CO., Wickliffe, O., for $6,490.

WHARF ADDITIONS.—San Francisco, Cal.—Harbor Commissioners have awarded contract for building additions to Jackson and Howard St., No. 1, wharves to HEALY-TIBBITTS & CO., San Francisco, for a total of $19,058.

ROLLER, STONE CRUSHER, ETC.—Fort Riley, Kan.—Constructing Quartermaster, Fort Riley, is taking bids until Jan. 16 for furnishing universal steam roller, one porcupine road scarifier and one reliance steel stone crusher.

SALE OF BOILERS.—Boston, Mass.—Bids are asked until Feb. 6 for the sale by the United States of two engines and boilers, 1 ship compass and 2,082½ lbs. old rope. Col. W. S. Stanton, Engrs. (Advertised, Engineering News.)

DRY DOCK.—Washington, D. C.—Contract for constructing dry dock at New York Navy Yard, bids for doing which were opened Dec. 31, has been formally awarded to GEORGE B. SPEARIN, 17 Battery Pl., New York, for $757,800.

RIVER STRAIGHTENING.—St. Louis, Mo.—F. W. Valliant, Sewer Comr., is stated to have prepared plans for straightening River des Peres, by digging canal channels connecting winding course of river at its narrowest points for nearly eight miles.

GUN CARRIAGES.—Washington, D. C.—Bids were opened at Army Ordnance Office Jan. 5 for furnishing 20 6-in. disappearing gun carriages. American & British Mfg. Co. appear to be low bidders; at $10,325 each for furnishing 10 carriages; for furnishing 20 carriages, Bethlehem Steel Co., South Bethlehem, Pa., was low bidder, at $9,415 each.

CANAL IMPROVEMENT.—Columbus, O.—State Board Public Works has authorized Charles E. Perkins, Ch. Engr., to prepare plans and specifications for improvement of state canal, for which $200,000 will be available. It is hoped to be able to award contracts by Feb. 15.

LATRINE.—Charleston, S. C.—Bids are asked by Bureau Yards and Docks, Washington, D. C., until Feb. 4 for construction of brick latrine at Navy Yard, Charleston, S. C. Jos. T. Endicott, Ch. Bureau. Specifications for above work are on file at office of Engineering News.

FERRY WHARVES.—Washington, D. C.—Washington Steamboat Co. has submitted plans to the Engineer Commissioner for rebuilding of its wharves Nos. 41 to 57 at foot of Seventh St. It is proposed to practically rebuild the wharves, and work is to be begun as soon as possible.

DRIVING PILES.—San Francisco, Cal.—Bids are asked by the California Debris Commission, Flood Bldg., until Feb. 3 for furnishing and driving piles, etc., for a portion of the dam known as Barrier No. 1, Yuba River, Cal. Capt. Wm. W. Harts, Engrs., Secy. (Advertised, Engineering News.)

DRAINAGE DITCH.—Bloomington, Ill.—A. H. Bell, C. E., Bloomington, is stated to have prepared plans and specifications for construction of drainage ditch along Green River in Henry and Bureau Counties. Bids will probably be called for shortly by the Commissioners of the District. Work calls for about 4,437,000 cu. ft. of earth excavation and total cost of improvement is estimated at $420,000.

WIRELESS TELEGRAPH STATIONS.—Washington, D. C.—Rear-Admiral Manney, Chief of the Naval Bureau of Equipment, has completed plans for establishment of line of wireless telegraph stations extending from Cape Elizabeth, near Portland, Me., to Galveston, Tex., many of the stations having a range of 250 miles. The Bureau of Equipment will advertise for bids for the construction of these stations.

TUNNEL.—Washington, D. C.—Secretary of Interior has signed the contract for construction of Gunnison Tunnel. Bids for the work were opened Oct. 5 and the contract was awarded latter part of that month to the Taylor-Moore Construction Co., Hillsboro, Tex., for $1,008,500. It is expected that actual construction work will be commenced within a month. Itemized bids for above work were given in our issue of Oct. 13.

MAIL CONVEYING SYSTEM.—Washington, D. C.—Following bids were received Jan. 4 by Supervising Architect for system of mail conveyors for post office at Chicago, Ill.: Link Belt Machinery Co., Chicago, Ill., $93,731.89; time, 6 months. Webster Manufacturing Co., Chicago, Ill., $64,000; time, June 1, 1905. Lamson Consolidated Store Service Co., Boston, Mass., $122,500; time, 20 weeks. Jeffrey Manufacturing Co., Columbus, O., $57,895; time, 165 days.

DOCKS, ETC.—Port Chalmette, La.—Contract for terminals of New Orleans Terminal Co. and "Frisco" R. R., at this place have been let to JAMES STEWART & CO., of St. Louis and New York. Work involves expenditure of about $2,000,000 and includes erection of docks, one and two-story warehouses and power house. Sub-bids on cement, steel and lumber will be received in two or three weeks by A. M. Stewart, at the Pittsburg, Pa., office of James Stewart & Co.

ARC LAMPS, ROPE, PIPE, ETC.—Washington, D. C.—Bids are asked by Bureau Supplies and Accounts until Jan. 24 for furnishing at Navy Yards, etc., Portsmouth, N. H., Boston, Mass., Newport, R. I., New York, N. Y., League Island, Pa., Annapolis, Md., Washington, D. C., Norfolk, Va., Key West, Fla., and Pensacola, Fla., a quantity of naval supplies, among which are arc lamps, brick, wire rope, bar steel, cast-iron pipe, drills, cement, etc. H. T. B Harris, Paym.-Gen., U. S. N.

DAM.—Los Angeles, Cal.—Bids are asked by the U. S. Reclamation Service, 1108 Braly Bldg., until March 15 for the construction of the Laguna dam and sluice ways, consisting of about 282,000 cu. yds. of earth excavation, 305,000 cu. yds. rock excavation, placing about 305,000 cu. yds. of solid rock in the dam and masonry core walls, building 27,150 cu. yds. of concrete, laying 80,000 sq. yds. of pavement, and furnishing and driving about 53,000 ft. of sheet piling, for the diversion of a part of the Colorado River about 10 miles northeast of Yuma. (Advertised, Engineering News.)

RIVER IMPROVEMENT.—Sacramento, Cal.—The Commission of Engineers employed by the state to consider plans for the development of the Sacramento River has made its report to Governor Pardee. According to the report total estimated cost of the projected work is $23,770,022, divided up as follows: Levee construction, $6,833,650; channel development, $7,269,730; west side canal, $3,155,130; drainage of basins, $671,040; easement weirs, $735,400; intercepting canals, $230,400; bridges, $500,000; land damages, $1,250,000; telephone line, $29,452; administration and contingencies 15%, $3,101,220. The Commission was composed of T. G. Dabney, Clarksville, Miss.; Henry B. Richardson, New Orleans, La.; Capt. H. M. Chittenden, Sioux City, Ia., and M. A. Nurse, State Engr. of California.

MINING NOTES.

MILL.—Murphy, Cal.—The Clary Gold Mining Co., of Murphy, W. H. Clary, Jr., Supt., will build a mill for its property.

MACHINERY.—Randsburg, Cal.—It is stated that the Corona Mining Co., of Randsburg, Cal., will equip its mines with machinery.

MILL.—Porterville, Cal.—Advices from this place state that a mining mill will, in the near future, be installed by the Bright Star Mine at White River.

AIR COMPRESSOR.—Nevada City, Cal.—It is reported that C. A. Brockington, of Nevada City, Supt. of the Orleans mine, will add a large air compressor to the equipment of the mine.

SMELTING PLANT.—Salt Lake City, Utah.—The Butler-Goldfield Mining & Refining Co. of Goldfield, Nev., W. B. Stevens, Pres., is figuring upon the erection of a smelting plant in the near future.

SMELTER.—Kingman, Ariz.—The Arizona-Mexican Mining & Smelting Co., according to reports, is to establish a smelter at this place within six months. J. J. Hawkins, Prescott, Ariz., is interested.

TUNNEL.—Victor, Colo.—Contract for driving the Fortunate tunnel into Grouse Mountana, near Victor, has been let to WILLIAM MELVILLE, Cripple Creek, Colo. The tunnel will be extended for 1,000 ft.

TUNNEL AND SHIFT.—Pottsville, Pa.—Contract for driving 2,400 ft. tunnel and 300 ft. shaft at Blackwood colliery, near this place, has been let to JOHN PUGH & SONS, Wilkesbarre, Pa., for about $50,000.

MACHINERY.—Salt Lake City, Utah.—C. O. Whittemore and associates, of Salt Lake City, are reported to be making preliminary arrangements for the equipment of the Panaca mine, in Lincoln County, Nevada, with machinery.

READERS' WANTS

This Department contains special requests, and detailed items, from persons in the market for supplies, and from others asking for the names and addresses of firms manufacturing certain tools, machinery and supplies required for work in which they are interested. ENGINEERING NEWS will be glad to furnish at once, free of cost, names and addresses of firms making the machinery or material desired, after which the item will appear in this column, **UNLESS OTHERWISE REQUESTED**, which request will be honored absolutely. The information **in all cases will be sent to our advertisers** handling the material wanted, or to other firms should it be out of the line of our advertisers. Every day we are receiving such requests with the understanding that it must not appear in the paper.

BELTING.—Wilmington, N. C.—The Reaves Mfg. Co. is in the market for belting.

BRICK MACHINERY.—Bluefields, W. Va.—H. H. Hale is in the market for brick machinery.

VULCANIZED FIBER.—Russia.—I. W. Librowicz, of Warsaw, is in the market for the above.

MINING SUPPLIES.—Dallas, Tex.—The Reid Coal Co. is reported as in the market for equipment for a mine.

60-HP. BOILER AND STACK.—Charlotte, N. C.—J. H. Griffiths, R. F. D. No. 2, is in the market for the above.

WELL DRILLINGS.—Apache, Okla.—The Apache Development Co. is in the market for drilling oil and gas wells.

50-HP. BOILER.—Kansas City, Mo.—The Central Sand Co. will soon be in the market for a 50-HP. boiler for a steamer.

ENGINE AND BOILER.—Mount Olive, N. C.—The Bell Lumber Co. is in the market for a 60-HP. engine and 80-HP. boiler.

HARDWARE AND LUBRICANTS.—India.—Gaban & Co., Calcutta, is in the market for heavy hardware and lubricant oils.

BOILER AND ENGINE.—Lawton, Okla.—W. M. Bruce is in the market for a 80 HP. boiler and a 60 HP. engine, and mine fans.

PUMPS, ENGINES, BOILERS, ETC.—Denison, Tex.—A. W. Acheson, Mayor, is in the market for the above for the proposed water-works.

MOTOR BOATS, ETC.—Mobile, Ala.—The Mobile Motor Car Co. is in the market for automobiles, motor boats, gas and gasoline engines, etc.

30 MILES 70-LB. RAILS.—Kansas City, Mo.—W. E. Winner, of the Leavenworth Constn. Co., is in the market for 30 miles of 70-lb. rails.

ELECTRICAL SUPPLIES.—Wilmington, N. C.—The Southern Electric Co. is understood to be in the market for various electrical supplies.

40-HP. ENGINE AND ICE MACHINE.—Carrollton, Ga.—J. G. Cheney, Secy.-Treas. Electric Co., is in the market for a 40-HP. engine and ice machine.

WELL DRILLING MACHINERY AND PUMPS.—Syria.—H. Sabbage et Fils, of Beirut, Syria, Turkey, is in the market for well drilling machinery and pumps.

MANUFACTURE OF PEAT.—Glendive, Mont.—E. S. Baer, Co. Surv., writes us that he wants data relating to the manufacture and handling of peat, including the cost of machinery, etc.

FOUNDRY EQUIPMENT.—Chattanooga, Tenn.—G. V. Prentiss, Secy. So. Skein & Fdy. Co., is in the market for the machinery, etc., for equipping a new foundry.

AGRICULTURAL IMPLEMENTS.—So. Africa.—J. W. Jagger & Co., President Street, Johannesburg, wants catalogues of agricultural implements and farm tools.

BRIDGE BUILDERS.—Calvert, Tex.—H. L. Stricker, Secy. Business League, wants to correspond with firms relating to building an iron bridge over the Brazos River.

STEEL MILLS IN CANADA.—Cleveland, Ohio.—The F. D. Cummer & Son Co. writes us for the names of firms in Canada who roll structural steel, such as tees, angles, beams, channels, etc.

MACHINES FOR MAKING CONCRETE BLOCKS.—West Salem, O.—J. H. Specht, R. F. D. No. 1, West Salem, writes for names of firms manufacturing machines for making concrete blocks.

MACHINE DRILL SHARPENER.—O'Hara, Caldwell county, N. Y.—The F. W. Katterjohn Construction Co. writes us that it wants the address of manufacturers of machine drill sharpeners.

ENGINE, BOILER, STAMP MILL, CRUSHERS, ETC.—Mocksville, N. C.—The Gray's Gold Mining Co., R. F. D. No. 1, is in the market for the above, as well as other material for its new mine.

WHITE STRUCTURAL GLASS AND WHITE MARBLE IN DIMENSION BLOCKS.—Fairmont, W. Va.—The Brady Construction Co., G. E. Suck, Treas., writes us that it is in the market for the above.

CONCRETE MATERIALS, APPLIANCES AND ARTIFICIAL STONE MACHINERY.—Philadelphia, Pa.—Edward Cunningham, C. E., writes us that he is in the market for the above mentioned material.

HYDRANTS (20), 4 AND 6-IN. WATER MAIN (9,000 FT.), AIR PUMPING PLANT, ETC.—Tobias, Neb.—Geo. W. Cobel, Mayor, writes us that he wants prices for furnishing the above for the proposed water-works to cost about $10,000.

STEAM HEATING.—Zanesville, O.—The Pinkerton Tobacco Co., O. W. B. Bovard, Asst. Treas., writes us that the company is about to install a system of steam heating by the use of exhaust steam. Data and books relating to this subject are wanted at once.

BUILDING SUPPLIES.—Philadelphia, Pa.—Chas. Gilpin, Contractor, Penn. Bldg., Philadelphia, and Baltimore, Md., is reported as in the market for brick, stone, structural material, electrical elevators, sanitary appliances, concrete work, skylights, refrigerators, tanks, boilers, pumps, compressors, etc.

DEVELOPMENT WORK.—Phoenix, Ariz.—It is reported that D. T. Carter of Memphis, Tenn., who has purchased five claims adjoining the Little Jessie and Dividend properties will expend from $15,000 to $25,000 in development work.

TELEPHONE SYSTEM.—Fresno, Cal.—Home Telephone Co., through Frank Mortimer, has applied for franchise for telephone system here. It is stated that at least $500,000 will be spent for plant and equipment if franchise is secured.

SMELTER.—Naco, Ariz.—It is reported that the Calumet & Pittsburg Mining Co. is to build a smelter between here and Don Luis and that a contract has already been let for construction of a $10,000 flume to bring the water from mine to the plant.

MINERAL LAND LEASES.—Washington, D. C.—All bids received by Indian Bureau, Dec. 5, for unleased coal and asphalt lands in the Wilburton-Stigler district of the Choctaw nation in Indian Territory, have been rejected, on the ground that they were too low.

NEW COMPANIES.—New York, N. Y.—New York Mining & Development Co., Augusta, Me., $3,000,000; I. L. Fairbanks, Augusta; F. J. Eckle and David Watts, Fort Plain, N. Y.——Elmore Gold Extraction Co., Mountain Home, Idaho, $500,000; W. J. Reynolds and W. J. Turner, Mountain Home.——Cumberland Gold Mining Co., Lewistown, Mont., $300,000; Peter Rosso, Maiden, Mont.; Oscar Stephens, Fort MacGinnis, Mont.

MEXICO.

The names of parties awarded contracts are printed in capital letters.

RAILROAD.—Tlacotalpan, Vera Cruz.—Robert Field, Seattle, Wash., is stated to have completed surveys for 15-mile railroad, which Mexican Sugar Refining Co. proposes to build on its plantation near here.

RAILROAD.—City of Mexico.—General Augustin Pradillo has been authorized to construct and exploit a 3-ft. gage railroad from Zitacuaro, state of Michoacan, to town of Joconusco, district of Valle de Bravo, state of Mexico.

STAMP MILL.—Chihuahua.—Company owning a mine at Guadalupe y Calvo, in Chihuahua, in which Senator Clark, of Montana, is heavily interested, proposes to add 40 stamps to the mill at the mine. J. A. Peabody is Supt. at the mine.

POWER AND IRRIGATION.—Jalisco.—Magdalena Lake Irrigation Co. is authorized by a concession granted to José de Landero y Cos as Pres., to utilize the waters of Magdalena Lake, state of Jalisco, for irrigation and motive power purposes.

POWER PLANT.—City of Mexico.—Manuel Alonzo, of Vera Cruz, has applied for a concession to utilize 80,000 liters of water per second from the Antigua River for generating motive power at a point about 30 kilometers from the city of Vera Cruz.

Information concerning contracts to be let or supplies to be furnished, and corrections of errors and omissions in published items, are invited. Full details regarding the equipment, tools, etc., required for the proposed improvements are specially desired.

RUBBER FACTORY.—Chihuahua.—Guillermo Muños, a banker of the city of Chihuahua, and Salvador Madero, of Parras, Coahuila, will build a factory for the production of rubber from the guayule plant. The plant will be located near Creel, state of Chihuahua.

SMELTER AND REDUCTION WORKS.—City of Mexico.—Congress has approved the concession granted by the Department of Fomento to John M. Wiley, representing the Interoceanic Ry., for establishing extensive reduction and smelting works in the states of Guanajuato and Jalisco.

COAL FIELD DEVELOPMENT.—City of Mexico.—La Acujita Co. has been formed with capital of $1,000,000 to develop and exploit the La Acujita coal fields at Sabinas, state of Coahuila. Eduardo Hartmann, Ramon Alcazar, Joaquin D. Casasus and Pimentel & Bro., all of City of Mexico, are interested.

RAILROAD.—Patzcuaro.—Surveys are under way for 60-mile railway, which the Rothschilds of Paris, France, owners of the Inguaian copper mines in state of Michoacan propose to construct from the mines to a connection with the National R. R. at this place. Carlos Eisenmann, City of Mexico, is in charge of preliminary work.

BUILDING.—City of Mexico.—La Mexicana Insurance Co., J. A. Palomo, Gen. Mgr., is to construct a new building at 2d Plateros and San José el Real Sts., City of Mexico, and has lately awarded rewards for three competitive plans to Manuel de la Sotarriva, Julio Corredor Latorre and Fudoro Urdaneta, engineers of the City of Mexico.

RAILROAD EXTENSION.—City of Mexico.—Mexican Government has approved survey for route of proposed extension of Mexican International R. R., south from Durango to the port of Mazatlan on Pacific Coast, and it is announced that the work will be commenced in a few weeks. R. Johnson, Durango, Mex., is Asst. Ch. Engr.

RAILROAD.—City of Mexico.—The National R. R. of Mexico will, it is stated, build a branch road from a point on its main line to El Cuguas, state of Vera Cruz, where the oil fields owned by the Oil Fields of Mexico, Ltd., are situated. It is said that this new line will cost about $2,000,000. R. T. Macdonald, City of Mexico, is Ch. Engr. National R. R.

MINING MACHINERY.—Oaxaca.—Considerable mining machinery will be purchased for the Baldomera mine, at Ocotlan, Oaxaca. Charles H. Hamilton is in charge at the mine, and he is joint owner of the property with Max Friend, of London. It is reported also that Hamilton and Freien have sold the Lachavia mine, near Ocotlan, to a Denver syndicate, and that a large amount of money will be put into improvements by the purchasers.

SMELTER, PAPER MILL, ETC.—Chihuahua.—State Government of Chihuahua has granted concessions to Col. W. C. Greene, of Cananea, Mexico and New York City, for the establishment of a large smelter and the construction of a railroad and telegraph and telephone lines and electric power plant, and for the establishment of a large paper mill, a furniture factory, and lumber mills. It is stated that more than $3,000,000 gold are to be invested in these enterprises.

SMELTER.—Oaxaca.—Luis Garcia Teruel, P. O. Box 2009, City of Mexico, President of Oaxaca & Ejutla Ry., has secured concession for installation of metallurgical and smelting establishment in the city of Oaxaca, Mexico, or in Ocotlan or Ejutla, state of Oaxaca, as he may elect. The capacity of the furnace shall be not less than 100 tons daily of gold, silver, copper, lead or other ores. The machinery, apparatus, etc., required for the installation

of the works may be imported duty free. Construction must begin within one year from Dec. 23, 1904, and must be completed within two years from the same date. $100,000 must be invested in the works.

ELECTRIC RAILWAY, TELEPHONE LINE.—City of Mexico.—M. D. Watson and J. R. Bickerdike, Chicago, Ill., who are interested in the Rosa Amarilla copper mines, state of Jalisco, have filed application for a concession to construct an electric railway from mines to the Pacific coast, also to operate a telephone and telegraph system in that section. A telephone line will run from the mines to Manzanillo at once according to the promoters' enterprise. Power is to be obtained from the Cusaipa and Santa Maria Rivers.

FOREIGN CONTRACTS—EXPORT NEWS.

The names of parties awarded contracts are printed in capital letters.

TRAMWAY RECONSTRUCTION.—England.—Town Council of Perth is to borrow $225,000 for reconstruction of tramways.

TRAMWAY FRANCHISE.—Portugal.—Council of Porto, Senhor Manoel de Sousa Avides, Pres., has opened a competition for a concession for exclusive rights to work tramways in the town. Competition closes March 15.

ELECTRIC RAILWAY.—Switzerland.—A decree has been published authorizing M. G. Anselmier, of Berne, to construct and work three electric funicular railways in that city; the cost of the construction is estimated at $80,000.

ENGINES, CARS, ETC.—Bulgaria.—Bulgarian Minister of Public Works, according to reports, is shortly to invite tenders for supply of 20 railway engines, 550 goods trucks, 60 passenger carriages and 10 mail vans, at a total cost of $900,000.

ELECTRIC STATION.—Denmark.—Tenders are asked by Director for Public Lighting, 22 B, Vestre Boulevard, Copenhagen, until Jan. 23, for installation of central electrical station at the Valley Gasworks, in accordance with conditions and drawings, which can be inspected at the Ostre and Valley Gas Works.

RAILS, FISHPLATES, ETC.—South Africa.—Mordey & Dawbarn, 82 Victoria St., London, S. W., Consulting Engineers for Johannesburg, Transvaal, will receive tenders until Jan. 26 for vignoles rails, fishplates, angle steel guard rails, bolts, nuts, coach screws and dog spikes, for the Johannesburg Municipal Tramways.

ELECTRIC TRAMCARS, ETC.—South Africa.—Tenders are asked by Municipal Council of Johannesburg, Transvaal, for furnishing 100 electric tramcars, two electric water-cars, one 5-ton traveling crane, one electric car traverser and various workshop tools, including erection at Johannesburg. Tenders must be addressed Mordey & Dawbarn, 82 Victoria St., London, S. W., Consulting Engineers for the Municipality, and must be received not later than March 6.

CONTRACT PRICES.

[Where (*) precedes items under Contract Prices the work was advertised in Engineering News.]

*SEWERS.—Havre de Grace, Md.—Contract for constructing about 3½ miles of sewers for this city, bids for doing which were opened Dec. 1, was let on Dec. 10 to F. E. Schneider & Co., Baltimore, Md., his itemized bid being as follows: Sewer pipe—5,480 ft. 6-in., 38 cts.; 6,575 ft. 8-in., 45 cts.; 1,610 ft. 10-in., 53 cts.; 515 ft. 12-in., 62 cts.; 440 ft. 15-in., 81 cts.; 810 ft. 18-in., 92 cts.; 780 ft. 20 in., $1.19; 831 ft. 24-in., $1.62; 560 ft. 30-in., $3.17. Y-branches—310 pieces 6-in. × 4-in., $1.61; 277 pieces 8-in. × 4-in., $2.08; 70 pieces 10-in. × 4-in., $2.67; 23 pieces 12-in. × 4-in., $3.32; 18 pieces 15-in. × 4-in., $4.27; 42 pieces 18-in. × 4-in., $5.08; 42 pieces 20-in. × 4-in., $6.70; 42 pieces 24-in. × 4-in., $9.36; 18 pieces 30-in. × 4-in., $11.65. Cast-iron pipe per ton, $35; 10 yds. concrete per yd., $6.50; rock excav. per yd., $1; 26 manholes, $55; 26 flushtanks, $113; lumber per M. ft., $30. The bid on branches includes 2 ft. of pipe.

SEWERS.—Jefferson City, Mo.—Bids were received by City Jan. 4 for constructing sewers in Sewer District No. 11. J. C. Herring, Cy. Engr., sends us the following information concerning the work, itemized bids for which are given below: Iron pipe is gas pipe weighing about 92 lbs. to the lin. ft. and costing delivered about $32 per ton; sewer pipe is standard salt glazed vitrified pipe; manholes are of hard-burned brick laid in cement mortar; mortar consists of one part of Portland cement to two of sand; riprap is irregular sizes of rock as they are found in the quarry and is deposited loosely in place; concrete is composed of Portland cement, sand and crushed rock in the proportion of 1:3:5; excavation is in black soil underlaid with clay. Cost of material and labor about as follows: Hard-burned brick per thousand, about $9 delivered; sand per cu. yd., $1 delivered; Portland cement (best) per bbl., about $1.50 delivered; flush tanks and fittings, about $35 each; riprap per cu. yd. delivered, about 80 cts.; crushed rock for concrete per yd., $1.25 delivered; unskilled labor per hour, 15 to 20 cts.; brick layers per hour, 60 cts.; teams per hour, 30 cts. Work to be paid for in tax bills upon completion and acceptance. Engineering and inspection furnished free by the city. Reasonable time given for completion of work. The bids received for the work were as follows: (1) engineer's estimate; (2) Gruber & Vetter, Jefferson City, Mo. (awarded contract); (3) T. W. Roberts, Independence, Mo.; (4) H. W. Kolkmeyer & Co., Jefferson City, Mo.; (5) Maquoketa Construction Co., Maquoketa, Ia.; (6) Rackliffe & Gibson, St. Joseph, Mo.; (7) Myers Construction Co., St. Louis, Mo.:

BIDS RECEIVED AT JEFFERSON CITY, MISSOURI, JANUARY 4, 1905, FOR CONSTRUCTING SEWERS IN SEWER DISTRICT No. 11.

Items.	Quantities.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Furnishing and laying 8-in. pipe, inch Ys and cement joints	9,626 ft.	$0.23	$0.21	$0.20	$0.18	$0.22	$0.26	$0.23
Lamphole incl. all materials, castings and labor	20	7.00	7.00	5.00	6.50	6.00	7.50	2.50
Flush tank (Alameda gravity flusher) incl. material, labor and royalties	2	75.00	95.00	65.00	70.00	65.00	69.00	90.00
Manhole, incl. material, castings and labor, 6 ft. and under	24	35.00	40.00	30.00	37.00	35.00	35.00	30.00
Each additional foot of manhole over 6 ft.	50	3.00	2 50	2.00	2.50	2.25	2.00	3.00
Excavation and backfilling under 6 ft. deep	10,509 cu. yds.	.18	.11	.16	.17	.18	.19½	.20
Excavation and backfilling 6 ft. or over, and under 8 ft.	1,850 cu. yds.	.24	.16	.23	.24	.24	.26	.25
Excavation and backfilling 8 ft. or over, and under 10 ft.	10 cu. yds.	.35	.40	.30	.35	.34	.35	.40
Excavation and backfilling 10 ft. or over, and under 12 ft.	20 cu. yds.	.40	.45	.35	.40	.43	.40	.60
Excavation and backfilling 12 ft. or over, and under 14 ft.	90 cu. yds.	.60	.70	.45	.48	.56	.55	.60
Excavation and backfilling 14 ft. or over, and under 16 ft.	140 cu. yds.	.75	.80	.60	.65	.65	.70	1.25
Rip-rap	100 cu. yds.	1.00	1.60	2.25	1.15	1.50	1.25	2.50
Concrete masonry (Portland cement, 1—3—5)	130 cu. yds.	4.50	5.50	6.00	4.55	6.00	5.62	7.00
Solid rock excavation in trench	20 cu. yds.	3.00	3.00	3.00	2.55	1.50	3.00	4.00
Embankment	100 cu. yds.	.25	.70	.30	.25	.15	.30	.30
Furnish and lay 14-in. pipe, inch Ys and cement joints	3,420 ft.	.47	.43	.45	.54	.48	.56	.50
Furnish and lay 14-in. iron pipe, incl. lead joints	135 ft.	2.00	4.00	2.55	1.75	1.90	2.50	4.00
Furnish and lay 15-in. pipe in same trench with 8-in. sewer	450 ft.	.50	.45	.50	.45	.50	.60	.60
Furnishing and placing ¾ in. water supply pipe, incl. fixtures	200 ft.	.25	.30	.20	.20	.20	.19	.25
Totals		$8,922.50	$8,364.55	$8,460.35	$8,499.96	$8,834.84	$9,926.31	$9,990.28

*DREDGING.—Norfolk, Va.—Following bids per cu. yd., place measurement, were received Dec. 30 by Capt. E. Evelett Winslow, U. S. Engrs., for dredging in Appomattox River: W. N. Mays, Petersburg, Va., 38¼ cts.; Leroy M. Lewis, Berkley, Va., 53 cts.; Atlantic Dredging Co., Philadelphia, Pa., 37 cts.

HIGH PRESSURE MAINS.—Brooklyn, N. Y.—Following bids were received by Department Water Supply, Gas and Electricity Jan. 6 (readvertisement) for constructing high pressure fire service mains in Brooklyn; (1) Jno. J. Cashman, 44 Court St., Brooklyn; (2) Excavation & Construction Co., 100 Broadway, New York; (3) Wm. Bradley, 86th St. and Broadway, New York; (4) T. A. Gillespie, 71 Broadway, New York; (5) Borough Construction Co., 189 Montague St., Brooklyn:

Bids received at Brooklyn, N. Y., January 6, 1905, for Constructing High Pressure Fire Service Mains in Brooklyn.

Items.	Quantities.	(1)	(2)	(3)	(4)	(5)
Straight cast-iron pipe	11,700 tons	$29.00	$29.00	$35.00	$31.00	$32.00
Special castings	875 tons	98.00	100.00	100.00	105.00	84.14
Steel castings	115,000 lbs.	.10	.10	.08	.10	.09
20-in. delivery pipe, laying	27,300 lin. ft.	1.30	1.50	1.25	1.20	1.30
16-in. delivery pipe, laying	34,500 lin. ft.	1.00	1.25	1.05	1.10	.90
12-in. delivery pipe, laying	54,500 lin. ft.	.85	1.00	.85	1.00	.80
8-in. delivery pipe, laying	7,400 lin. ft.	.73	.90	.75	.65	.65
20-in. suction pipe, laying	100 lin. ft.	5.00	2.00	5.00	2.00	1.30
16-in. suction pipe, laying	100 lin. ft.	4.00	2.00	4.00	1.50	1.00
Extra excavation	11,500 cu. yds.	.75	2.00	2.00	1.75	.75
20-in. stop-cocks, furnish, lay, etc.	76	300.00	400 00	275.00	315.00	274.03
16-in. stop-cocks, furnish, lay, etc.	119	200.00	300.00	175.00	210.00	182.60
12-in. stop-cocks, furnish, lay, etc.	142	110.00	200.00	110.00	120.00	101.14
8 in stop-cocks, furnish, lay, etc.	720	65.00	90.00	50.00	60.00	56.20
Cast iron gate boxes, etc.	875,000 lbs.	.03	.03	.03	.03¼	.03
Hydrants, haul and set	725	10.00	10.00	10.00	12.50	10.00
Cobble pavement, relaying	8,200 sq. yds.	.20	.40	.25	.35	.20
Block pavement, relaying	16,500 sq. yds.	.30	.50	.50	.40	.30
Block pavement on concrete foundation, relaying	11,000 sq. yds.	1.75	3.00	1.50	1.00	1.70
Asphalt pavement on concrete foundation, relaying	11,600 sq. yds.	3.00	4.00	3.50	3.00	3.00
Brick pavement on concrete foundation, laying	220 sq. yds.	3.00	3.50	3.50	4.00	4.00
Wooden pavement on concrete foundation, laying	570 sq. yds.	3.00	4.00	3.50	4.00	4.00
Bluestone curb	1,550 lin. ft.	.15	.10	.20	.25	.25
Bluestone flagging, relaying	7,800 sq. ft.	.05	.05	.10	.15	.10
Cement sidewalk, laying	6,960 sq. ft.	.20	.20	.20	.20	20
Concrete	300 cu. yds.	10.00	10.00	8.00	8.50	8.00
Brick work	900 cu. yds.	12.00	15.00	12.00	13.50	12.50
B. M. of lumber	30,000 ft.	25.00	20.00	30.00	30.00	25.00
Steel shapes	15,000 lbs.	.05	.06	.04	.05	.04
Rock excavation	460 cu. yds.	3.75	5.00	2.50	5.00	2.75
Corporation cocks	60 ¾ in.	4.00	2.00	2.50	4.00	3.00
Totals		$792,691	$916,072	$867,717	$843,509	$795,314

SEWERS.—New York, N. Y.—Following bids were received by President Borough of Brooklyn Dec. 28 for material and labor for constructing sewer in Knickerbocker Ave.; (1) James Holmes & Co., (2) Sigretto & Merino Co., (3) Jas. J. Creem, (4) M. J. Dady, (5) H. A. Ruton & Co., (6) H. Newman, (7) United Engineering & Contracting Co.; all bidders from Brooklyn:

Bids received at New York, N. Y., December 28, 1904, for Material and Labor for Constructing Sewer in Knickerbocker Ave., Brooklyn, N. Y.

Items.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
1,750 cu. yds. brick masonry	$11.00	$12.00	$15.00	$10.00	$11.00	$20.00	$18.00
1,720 cu. yds. class A concrete	9.00	8.00	15.00	8.00	7.29	5.90	8.90
4,500 cu. yds. class B concrete	7.00	7.50	11.00	7.00	6.45	5.90	8.70
299 tons steel I beams, bearing plates, tie rods, etc.	75.00	50.00	60.00	60.00	53.00	80.00	70.00
74 tons corrugated steel rods	70.00	45.00	100.00	60.00	50.00	80.00	100.00
440 sq. ft. metal lath B.B., No. 27 gage	.05	.05	.10	.06	.12	.50	.10
11,900 sq. ft. galvanized steel wire woven cloth, No. 20 gage, ¼-in. mesh	.05	.05	.05	.10	.20	.05	.10
17,900 cu. yds. excavation	1.23	1.83	1.00	3.00	1.40	1.80	2.72
335,000 ft. B. M. sheeting and bracing	25.00	18.00	.01	25.00	17.50	.01	32.50
5,000 ft. B. M. foundation planking	21.00	18.00	20.00	25.00	17.50	.01	52.00
15 manhole heads and covers	13.00	40.00	10.00	60.00	11.50	10.00	20.00
Totals	$124,444	$126,884	$145,592	$149,456	$113,969	$134,806	$175,657

TRADE PUBLICATIONS.

(The standard sizes for pamphlets and trade catalogues recommended by all the principal engineering societies of the United States are: 3½ × 6 ins., 6 × 9 ins., and 9 × 12 ins.)

COMMUTATOR TRUING.—Ft. Wayne Electric Works, Ft. Wayne, Ind. Paper; 8 × 10½ ins.; pp. 4; illustrated.

Three styles of commutator truing devices are shown, depending on their method of support: the motor shaft, the bearing pedestal, or the frame of the machine. Working capacities are stated.

TIMBER PRESERVATION.—Consolidated Cross-Tie Co., 27 William St., New York, N. Y. Paper; 3¼ × 6 ins.; pp. 8; illustrated.

This little pamphlet describes the Giussani process of treatment, using any desired chemicals and eliminating the usual equipment of retorts, pumps, etc. A railway in Italy has contracted for ties thus treated, and a plant is in operation at the St. Louis Exhibition.

GAS PRODUCERS.—Wile Power Gas Co., Rochester, N. Y. Paper; 6 × 9 ins.; pp. 15; illustrated.

This contains a general description of different types of gas producers, together with a statement as to the advantage of producer gas for power, fuel and other purposes. A table is given of the cost of power developed by steam engines and gas engines using illuminating, natural and producer gas.

GAS AND OIL ENGINES.—The Motor Engine Co., 15 William St., New York. Paper; 3½ × 6 ins.; pp. 16; illustrated.

Excellent mechanical design is the principal novelty claimed for the engine built by this company. The trunk-piston idea is discarded, and, instead, a piston-rod crosshead and connecting rod is used. This gives the advantage of a front cylinder head and enables the front end of the cylinder to be used as a compression chamber in the regular two-stroke cycle. The engine is usually built duplex, so as to counterbalance almost completely. Various mechanical details of special design are brought out in the pamphlet.

DEPARTMENT OF COMMERCE AND LABOR, Light-House Establishment.—Sealed proposals will be received at the office of the Light-House Engineer, Tompkinsville, N. Y., until 1 o'clock p. m., Feb. 9, 1905, and then opened, for furnishing the material and labor necessary for the erection and completion of the Coal Shed, Light-House Depot, Tompkinsville, N. Y., in accordance with specifications, copies of which, with blank proposals and other information, may be had upon application to LIEUT.-COL. WM. T. ROSSELL, Corps of Engineers, U. S. A., Engineer. 2-3t

OFFICE CONSTRUCTING QUARTERMASTER, DELAWARE CITY, DEL., Jan. 7, 1905.—Sealed proposals, in triplicate, will be received here until 11 a. m., Feb. 6, 1905, for installing steam heating plant in Administration Building, Fort Mott, N. J. U. S. reserves right to accept or reject any or all bids. Information furnished on application. Envelopes containing bids should be endorsed "Proposals for Heating," addressed CAPT. LOUIS F. GARRARD, JR., Q. M. 2-3t

For other Proposal Advertisements see pages 35, 36 and 37 of Advertisements